A METHOD FOR CREATIVE DESIGN

ADOLFO BEST-MAUGARD

ALSO BY

ADOLFO BEST-MAUGARD

THE

SIMPLIFIED HUMAN FIGURE

An easy and original method
for drawing the human figure
and its component parts.

This is a BORZOI BOOK

published in New York by ALFRED A. KNOPF

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By

ADOLFO BEST-MAUGARD

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1949

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PREFACE

The series of lessons used in this special method are quite simple and are intended both for children and for adult students. It is primarily for those who love drawing and design but have found them an unattainable dream, having given up their hopes and ambitions because of the difficult years of study required by the usual methods. It is the purpose of this book to give them the opportunity of making their dream come true, and this realization may be brought within the realm of possibility by the application of their efforts a short time each day, in a trial of a few weeks.

Some people are unhappy in life because they are unable to express themselves through the different arts, such as Music, Painting, Dancing, Singing, etc., since to do so they must study for many years. By that time they have lost their first fresh impulse. They are so tired of the drudgery that they do not care whether they express anything or not. And most persons do not even try to study.

Individual creation should give us a relief from the routine of everyday work, and in this method we will try to make our designs merely for our own amusement. Art is to be considered as a plaything, a refreshing pursuit by which we may find an outlet for our emotions through our own creations.

We shall give the student what he is unconsciously striving for: the materials and suggestions which will

make him utilize his creative energies by putting him in the proper environment. By giving him the general principles, we shall help him to find the most direct road to complete self-expression through his own experience, thus eliminating unnecessary waste of effort and time. The most salient features of this system are the simplicity and rapidity with which results are obtained.

The student will find himself making progress without any conscious effort; from the first week's study he will begin to realize unexpected potentialities for artistic expression which will develop later on a new faculty, and he will realize that he is now able to create his own schemes, which before he never dared dream of doing. The development of this power within him is the basis of his real individuality and makes him a creator in the finest sense. He will be no longer under the necessity of copying from others, he will dream his work out of his own imagination and his production will be unique.

The child enjoys drawing; why should not the adult enjoy it as well? For the toiler and the business man drawing should be as much a diversion as it is for children. A grown-up person who has never studied the art of design will appreciate it as fully as a child enjoying his first lessons, and with the same chances of success.

Thanks are due the Metropolitan Museum of Art and the Museum of Natural History for the use of certain of the illustrations; also to Harry C. Block and to Julian P. Smith for their aid in revising and preparing the manuscript for the press.

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BOOK I
CREATIVE DESIGN

PART I

I. THE SEVEN MOTIFS

The suggestions and rules that we will follow are simple and easily understood by everyone. They are quickly grasped and retained in the mind of the student.

In this method, there are seven simple motifs and signs, which we consider as fundamental, and a few rules to follow, and these, once in the student's memory, will enable him to make an infinite number of combinations and designs which he will enjoy. These seven motifs are already well known to us, and we find them in the forms and shapes of all our surroundings.

The first is the Spiral or the very familiar scroll motif, suggested in the whirlpool, or in the rolled shape of such things as the snail's shell.

The second is the simple Circle. We see it in the shape of the sun or in the ripples in the surface of still water into which a stone has been dropped.

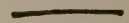
The third is the Half-circle, found in the rainbow and in the crescent moon.

The fourth is Two Half-circles in the form of the letter S, like the shape of flames of fire.

The fifth is the Wavy line; we see it in water waves or in the shape of wavy hair.

The sixth is a broken Zigzag line; it suggests the outline of the broken peaks of mountains or the lightning.

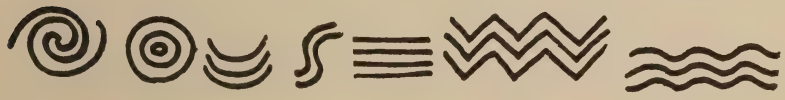
The seventh is nothing but the simple Straight line which gives the position of quiet hanging things, trunks of trees, or the ocean line of the horizon.



These seven motifs, which, as we have seen, are already familiar to us in the shapes of natural objects, are the fundamentals of this method of design, and everything that we do hereafter will be in the way of combining and arranging two or more of the motifs into attractive designs. There are two rules to be remembered:

1. Never cross lines, or allow one line to interfere with another, but let every line go on its way without touching the others.

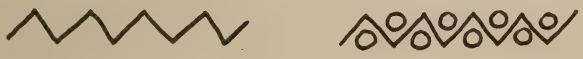
2. When using similar motifs, as in border arrangements, they should be drawn in parallel and at equal distances apart.



2. BORDERS

The student should now experiment with a few simple arrangements:

Take motif 6 and fill the free spaces with the second motif:



Instead of circles, half-circles (motif 3) may be used:

The fifth motif also makes an excellent basis for border design. Add dots or circles in the free spaces:

Now try the half-circle (motif 3) in a series like a letter M, and also use the circle in the spaces left.

Naturally we can use these motifs in all their possible shapes, making them more open or close together, as it may best suit each scheme. The half-circles may be used in succession in a condensed arrangement (A) as well as in the following open arrangement (B).

A

B

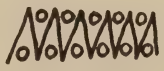
The same for the wavy line, or the zigzag, or for the S motif.

It is obvious that if we only developed the few borders here demonstrated, we should already have an immense variety. The first, of the wavy lines and circles, Fig. A, in a closer arrangement would be Fig. B and the second, of zigzags and circles, in the same way would be Fig. C and the third of the S motif would be Fig. D and Fig. E.

A

B

C



D

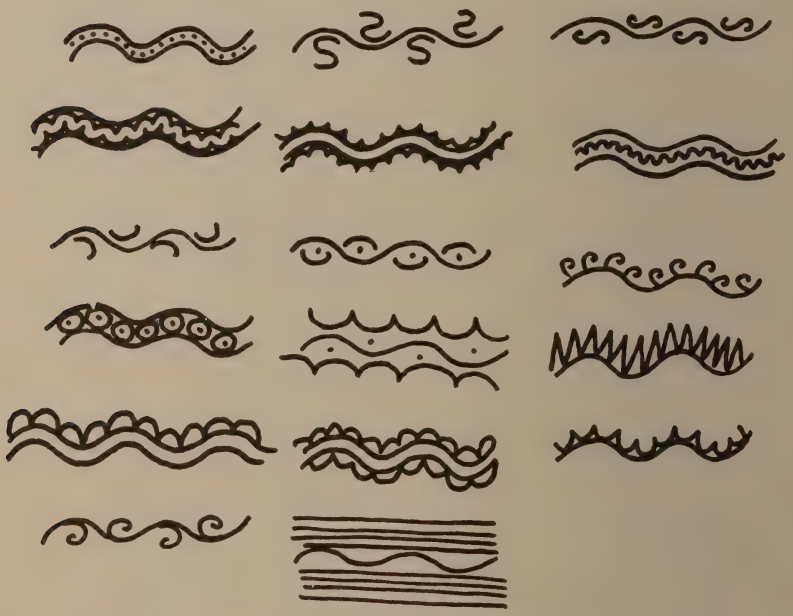
E

Thus we see how simple it is to do those borders and we will now try to elaborate them, combining as many motifs as possible in making designs.

Start with the first arrangement of wavy lines and circles, following it with other motifs, and so on with the others as tried before.

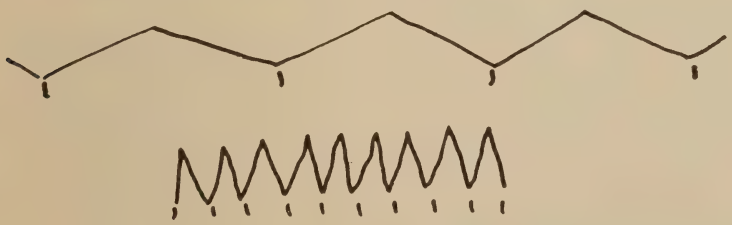
It cannot be too strongly emphasized at this point, that a mere reading or even attentive study of this method will not yield the best results. Only actual practice with original combinations of the motifs will give the necessary training of the hand and the release of true creative power.

An infinite number of combinations are possible with the seven motifs and the student should try to exhaust all that his imagination suggests to him. The examples here given (in this instance, all constructed on the wavy line as a base) are not to be copied exactly; they are merely illustrations of some of the combinations, and from these many more may be developed.

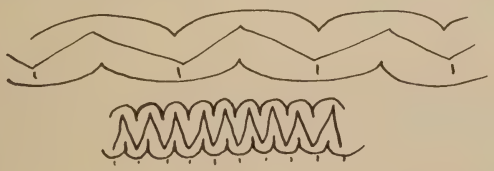


For the beginner, a practical method for building border designs is the following process. First think of a steady rhythm or beat, either slow or fast, and then indicate on paper by means of a series of dots, the actual intervals of the beat, thus:

Then select the basic motif of the proposed border and adapt it to the given rhythm:



By adding other motifs in an arrangement harmonizing with this given rhythm, the border is developed.



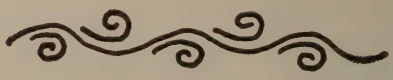
This method, from this point on, is divided into progressive lessons. The student should be careful not to advance beyond any lesson before he has mastered what has gone before.

The following are further examples of borders showing the combination of all the motifs:

In designing borders, the student should feel the major movement of rhythm and harmony underlying the design he draws. Borders must move forward, and grow as they move. This movement will be obtained by choosing one motif from among the seven and building on that, adding other motifs the design may require as secondary decoration supporting the central one. The single ruling motif of the border is called the *dominant*, and the complementary one the *subordinate*.

Dominant.

Spirals are the Subordinate.

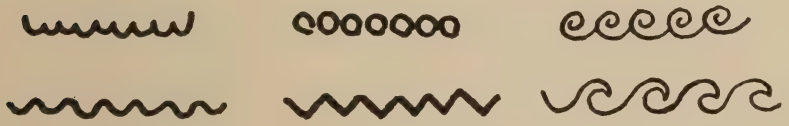


This continuous suggestion of movement in a definite direction is enhanced by the tangential junction of the subordinate motif, which always springs from the dominant motif in the forward direction of the movement.

3. POSITIONS OF THE MOTIFS

There are four basic positions to be observed in drawing the seven motifs:

1. Horizontal position: Draw the motifs in a continuous forward line.



2. Vertical position: Draw the motifs up and down.

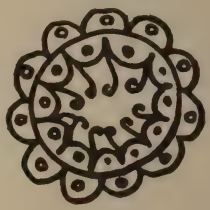
3. Right-hand oblique: Draw the motifs to the right.

4. Left-hand oblique: Draw the motifs to the left.

In drawing the motifs, follow these four general positions either in the single line or parallel.

4. ROSETTES AND FLOWERS — (full view)

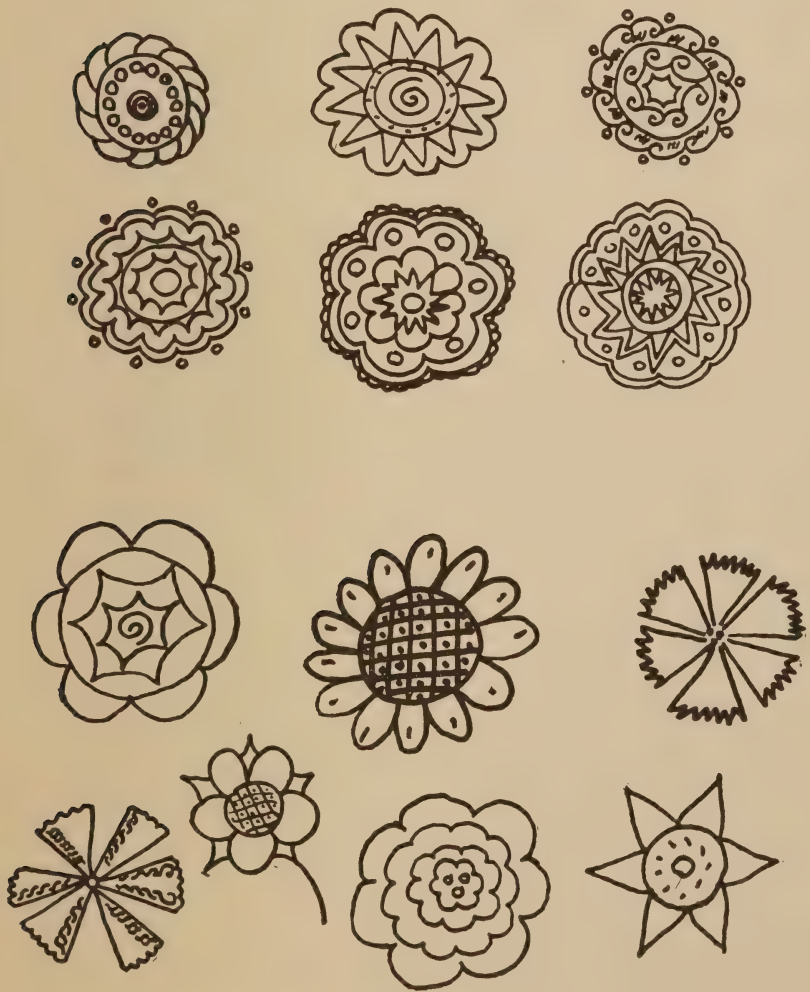
A



B

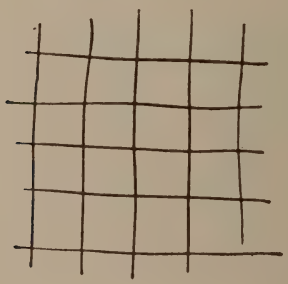
Now that we are able to draw designs of elaborate borders, let us see how they may be used for a different purpose; we are going to draw rosettes and flower shapes by using the borders already designed. First draw a circle. (It does not matter if it is not perfect for flowers are not perfectly round). Then pick up some simple border, any one will do, but since it is for a flower, we suggest taking one with the shape of petals (like the one of half-circles and circles (Fig. A) and draw it around the circle, instead of forward in a straight line A second row can be drawn inside of the circle and the center filled with scrolls or dots (Fig. B). An

infinite variety of rosettes and flowers can be designed, depending on the borders used and the invention of the student in their arrangement.

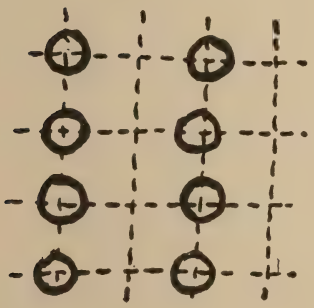


5. ALL-OVER PATTERNS

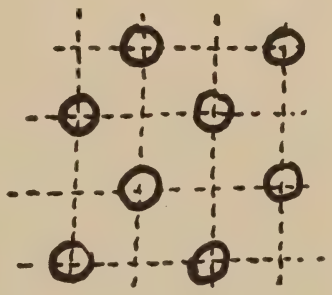
We will now give a few suggestions for arrangements of all-over patterns, which can be used to represent the centers of the flowers. This all-over pattern is disposed on a plaid distribution and we will, accordingly, draw first a rough sketch of a plaid design:



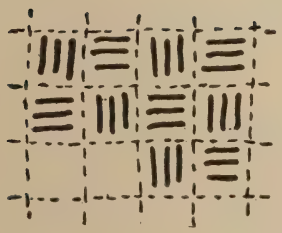
The motifs should be placed at the crossings of the lines so as to give an even distribution (Fig. A), or in alternating arrangement (Fig. B). Any of the simple motifs may also be used in the spaces (Figs. C & D) after which, the guiding lines should be erased.



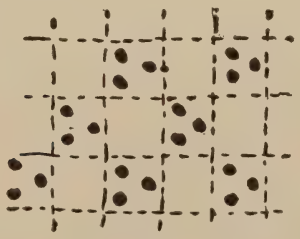
A



B

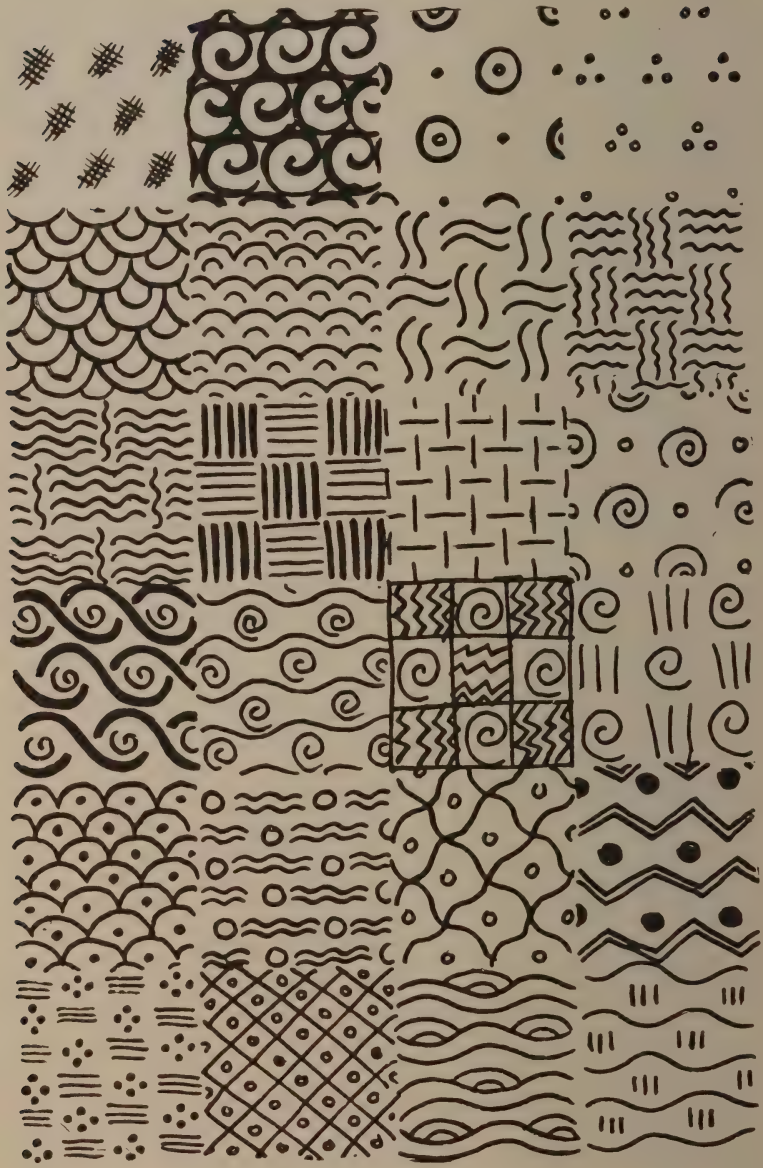


C



D

The following page gives a few suggestions for all-over patterns.



All the numberless combinations that can be made with the seven motifs are divided into two distinct groups of expression. The first expresses quiet, repose, balance, and is called Static arrangement. The second expresses movement, development, growth, a breathing quality, and is called Dynamic arrangement.

To the first group belongs the all-over design which gives a restful feeling of stillness. The motifs are balanced against each other in a pattern, and spread evenly over a surface.

Static Arrangement:

The second group includes borders and frets in which there is a feeling of movement. In all of them the eye feels the necessity of following the lines.

Dynamic Arrangement:

Usually, motion is represented and felt as running from left to right.

When lines join as forces, they join in the direction of the movement of the border.

PART II

6. GROWTH

All branches, flowers, and leaves follow a principle of design in nature that we call growth. In growth, a series of leaves or flowers increase or diminish evenly and harmonically along a stem. To design a fern-frond, for example, draw the curved central vein, with deep half-circles beginning at the base and tapering gradually to a point at each side of the tip.

The lilies of the valley shown below illustrate this principle of growth.

Observe that all branches, stems, and flowers spring out in an upward-slanting curve. This is called Tangential Growth.

This can be done in symmetrical arrangement, or alternating.

Symmetrical Alternating

The character of a border consists in steady repetition of motifs which create the rhythm; this even repetition in a rhythm is called continuous growth. The harmony of the whole depends on the right selection and arrangement of the component motifs. The back-ground is called space.

Growth being, as we have said, the harmonious repetition of the same form in an augmenting or diminishing proportion (Fig. 1), we find in nature the

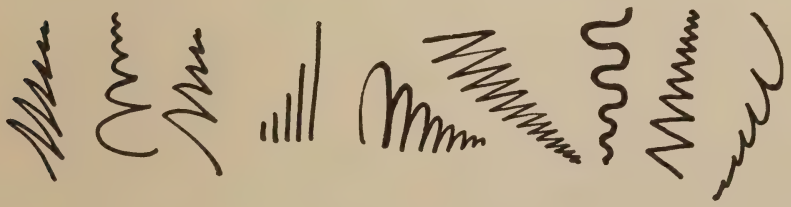


Fig. 1.

combined manifestation of growth and tangential junction in symmetrical or alternate arrangements, in branches, leaves and flowers. [Fig. 2, see next page.]

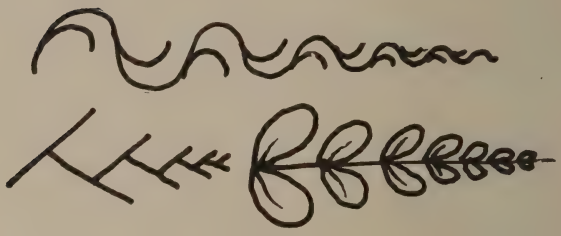


FIG. 2.

Also in structures, buildings, and perspective:

7. FLOWERS — (in profile)

A flower in profile is made by drawing a round flower, divided in the center:

Erase half of it:

To this half-circle add the shape of a flower seen from the side:

And complete with a few scrolls:

All the following examples from early American designs of conventional flowers are an aid in understanding the possibilities for creating new combinations which are endless and a few suggestions will be found on the next page.

8. LEAVES

Add leaves and stems to the flowers. To make a simple leaf, draw two half-circles joined at one end in an almond shape, and for the scalloped edges add small half-circles or zigzags.

To complete, draw a straight line down the center, with other small straight lines slanting upward at the side, to suggest the veins of the leaf.

Practise drawing a great many kinds of leaves, using some of these as suggestions.

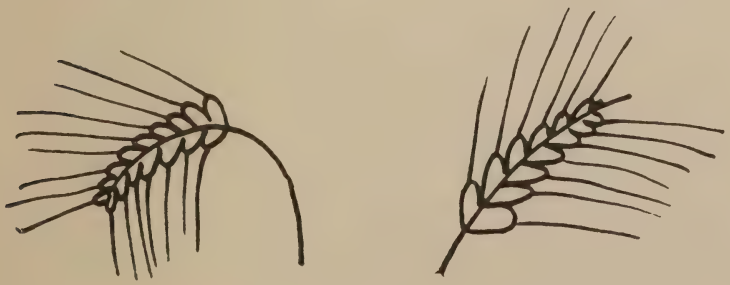
In the following examples most of the leaves have been drawn using the seven motifs in growth arrangement.

9. STEMS

The stems of flowers or fruits are designed with two parallel lines, and one motif between these two lines will add to the decoration.

Thorns are designed with the motifs outside the lines of the stem.

Wheat ears are very easy to draw:

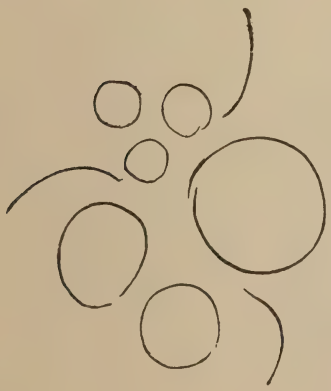


Flowers may also be designed very simply in a great variety of ways.

10. FLOWER COMPOSITIONS

Put these designs together in the natural order, and the result is a composition of flower, stem, and leaves:

It is now time to begin making a few flower compositions. The first one must be very simple. First draw lightly an outline of circles and curved lines as a guide to the blossoms and stems. Fill in with petals and leaves:



A flower composition in thin light lines:

Design with light and heavy lines. Draw the thin lines first, and fill in the black spaces with heavy thick strokes:

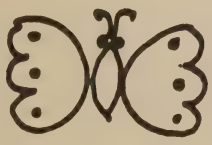
NOTE: These designs as well as that on page 20 are adapted from early American pottery.

PART III

II. BUTTERFLIES AND DRAGON FLIES

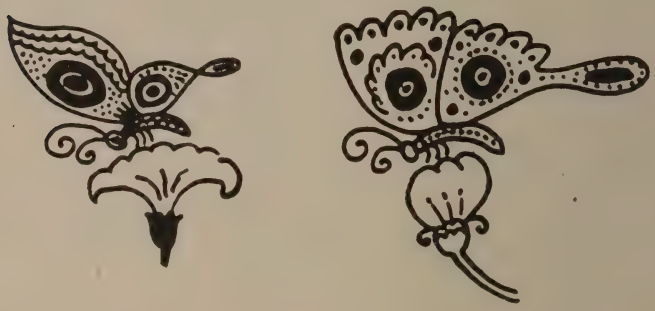
The conventionalized butterfly may be easily formed out of two flower shapes in profile.

Put the body in the center. The antennæ are represented by scrolls, and the eyes by small dots or circles.



With a few variations, all kinds of butterflies may be drawn on this general design.

Butterflies in profile:

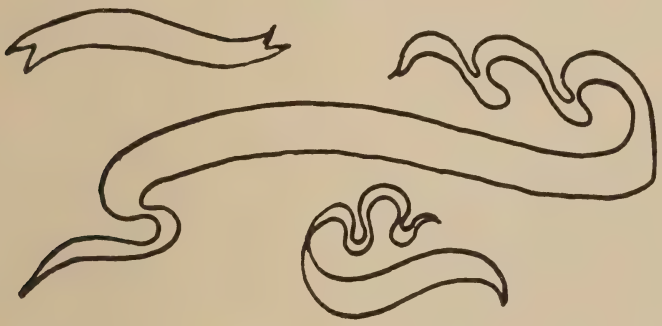


The dragon fly has a long body shaped like a shallow S motif, drawn in parallel with decorations between. The wings are leaf-shaped, but decorated differently, with two small circles for eyes. The student should develop his own ideas for decoration.

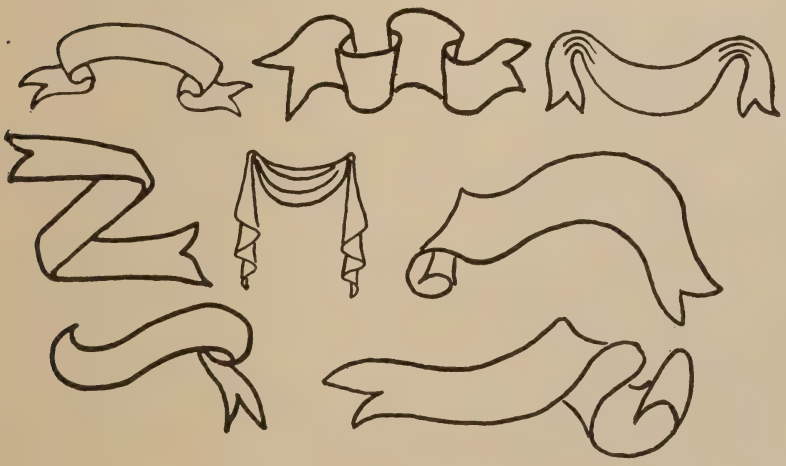
12. RIBBONS AND BOWKNOTS

The ribbon and the bowknot are familiar traditional designs in early American art.

The simplest ribbon is made of two S motifs drawn in parallel, with a single zigzag at either end; or with the ends of the S motifs joined; also combined with wavy lines.



There are many other combinations:



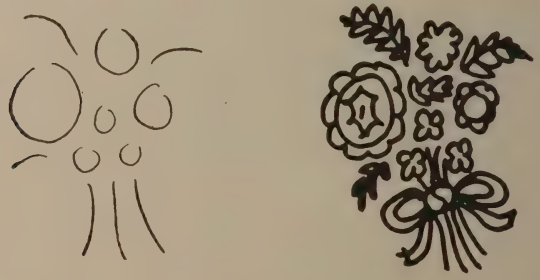
Draw the center of the bowknot first. Make a circle with an S in it:

Add two irregular, double half-circles on each side.

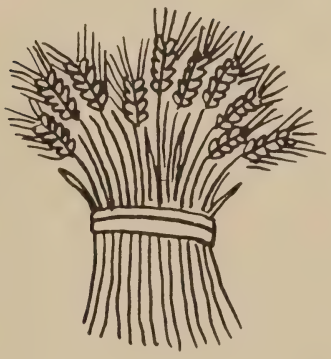
Design other shapes of bows, using any of the examples shown above, as in these suggestions.

For a flower composition tied with a bowknot, sketch another small outline. Let the stems show clearly, and tie the bowknot around them.

Butterflies and dragon flies hovering about the flowers, may be added wherever they seem to belong.



Take care that in these designs, as in all others drawn by this method, every flower, leaf, stem, ribbon or band is shown completely. Never draw one object partly hidden or covered by another. Flowers must be full face or flat profile. No perspective.

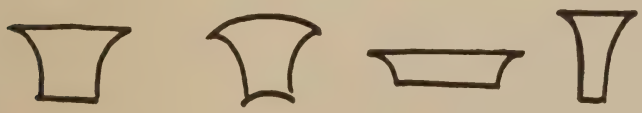


13. BASKETS

The basket is a widely used motif in nearly all decorative compositions containing flowers.

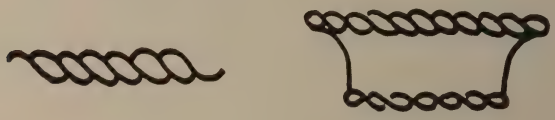
For a very simple basket design, draw a straight or slightly curved line for the upper rim, and a corresponding line for the base;

Two half-circles on the sides will complete the outline.

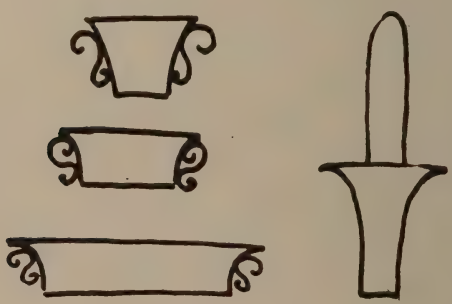


Suggest the weaving of the basket with an all-over pattern; or a simple plaid.

The rim and base, as well as the handle, may be done with an S line used as conventionalized cord.

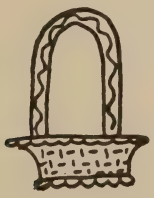


There may be handles at the top or sides.
Make the side handles with simple double S lines.



Fill the basket with flowers following the lines of construction.

Experiment with these basket shapes, adding flowers to harmonize with their structures in the same way that the bunch of flowers was done.



PART IV

14. VASES, PITCHERS AND URNS

The outline of a jar reduced to its simplest elements consists of two motifs: a circle for the center, and shallow half-circles in basket shape, one for the mouth of the jar, and an inverted one for the base.

The handles may be in the S line shape with the ends curling inward toward a spiral.

For a pitcher vary the shape of the neck, and add one handle.

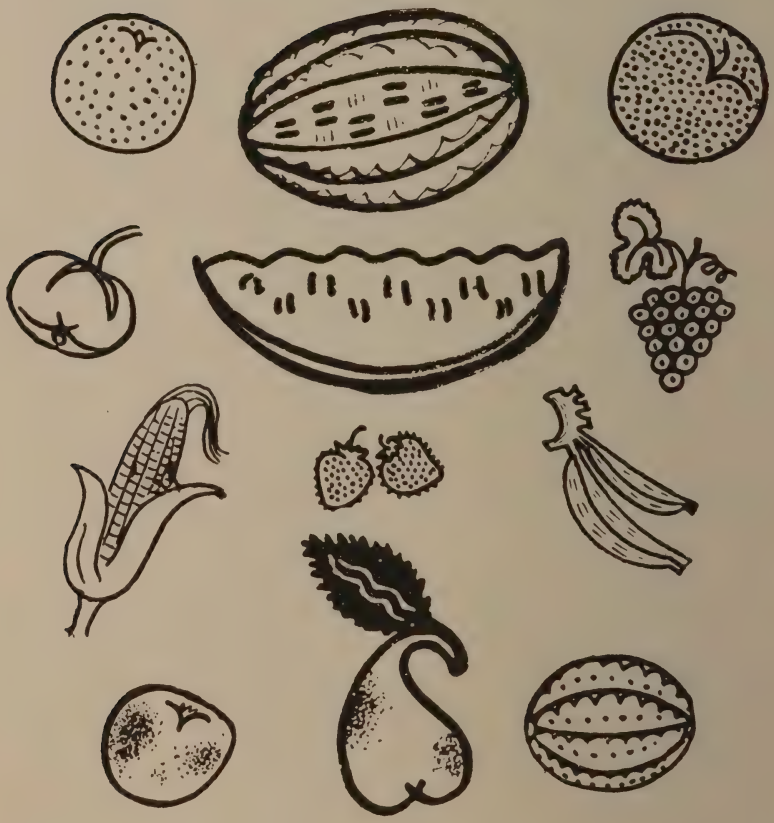
A study of these shapes will suggest further original variations.

The typical urn consists of a half-circle for the body and a smaller inverted half-circle for the base. Add a circle to join these two, with an inverted basket shape and two shallow half-circles joined to form the mouth. The handles may be similar to those on the vases.

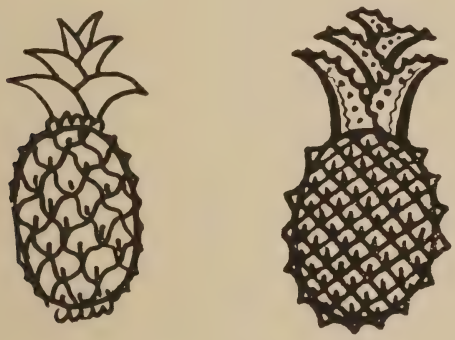
This is a very typical motif of ornamentation used in the past century in which this and many other classic forms were developed from the Greek. The same structure, in elongated form, may be used in design as balustrade or column.

15. FRUITS

In drawing fruits, study the use of motifs in borders or all-over patterns. The repetition of a single motif often gives the most decorative effect.



There are many ways of using different motifs and patterns to draw the same fruit. Taking these two pineapples as examples, try drawing the fruits shown above with different borders and all-over patterns.

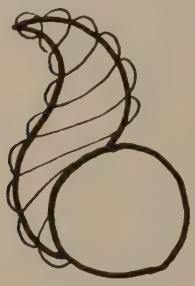


16. FRUIT COMPOSITIONS

A fruit dish is designed in the same way as the lower half of an urn. Or else the student may use one of the baskets he has already drawn, and fill it with fruits and leaves in this way: Other suggestions for fruit dishes:

A cornucopia, or "horn of plenty," is very decorative, and seems elaborate, but on examination it is quite simple:

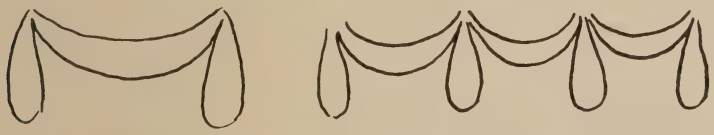
For the outline, draw a circle for the mouth, an S line on the side, and a half-circle from the center, running up to join the S line in a peak, for the horn. Then with a series of S lines beginning at the top of the peak and growing longer towards the base, twist the horn into a whirl. When the cornucopia is filled with fruits, only the upper half of the opening must show. Finish this edge with the same S line border that is used on the basket rims.



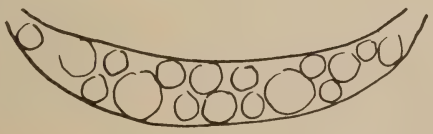
17. GARLANDS

The foundation of the garland is a festoon made of two shallow half-circles.

For a more decorative garland, drop a deep half-circle between each festoon, or loop.



Begin with a single loop, and sketch in the pattern for flowers or fruits.



Suggestions for garlands:

PART V

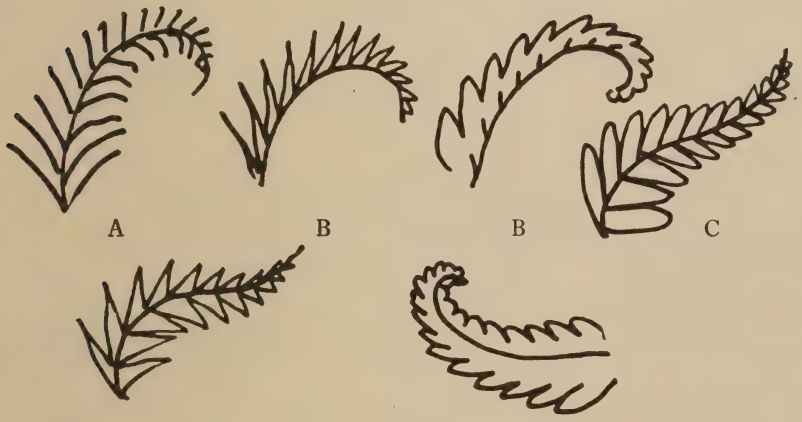
18. PLANTS AND EARTH

Leafy shrubs and the foliage of tree branches are most simply represented by half-circles in succession. Half-circles with straight lines may represent a small bush:

The zigzag line is useful in designing long pointed leaves, or long grass:

Groups of short straight lines in a semicircular arrangement suggest grass. An all-over pattern of these groups becomes a meadow:

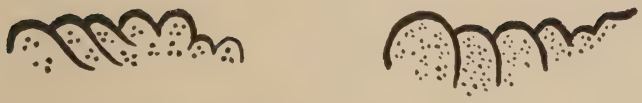
There are many variations in the fern and palm leaf. Begin by drawing a curved line for the center of the leaf, and let the smaller fronds spring from it, diminishing to a point. (Fig. A.) Use the zigzag in acute angles, or half-circles in close arrangement. (Fig. B.) Fern leaves are made in much the same manner. (Fig. C.)



Design a small, trunkless palm tree by joining several leaves together at the base.

Practise drawing these examples of plant-life shapes:

The surface of the earth is uneven, full of little hillocks and depressions, which may be represented by an irregular line of S motifs and half-circles.



Fill in with a pattern of circles for stones, groups of straight lines for grass, and tiny dots, in reality small closed circles, for sand.

19. TREES

The trunk of a tree must spread a little at the base, and again at the top where the branches of foliage begin. The roughness of the bark may be represented by an all-over pattern.

Examples of the use of the half-circle and the zigzag in drawing foliage:

Draw the palm tree with a long trunk decorated with a border or all-over pattern, and let the fronds radiate from the top as they do in the short palms pictured among the small plantlife.

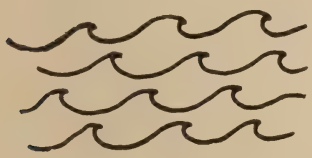
In the willow tree, all the branches droop, and the leaves spring from both sides:

20. WATER AND WAVES

Still water is represented by parallel straight lines; moving water, by wavy lines, the wave being deepened to represent the degree of movement of the water.

Half-circles in succession give the feeling of shallow ripples:

For heavier waves, draw the S line in succession, or the scroll:

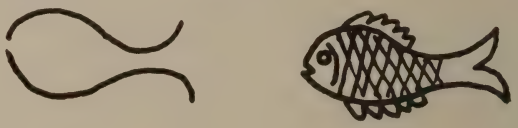


To represent a marsh, combine water and grass alternately:

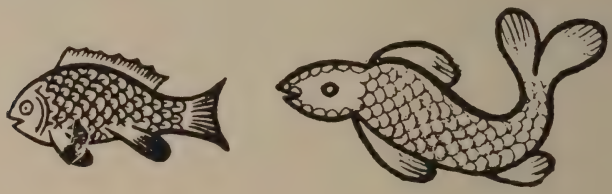
Falling water:

21. FISH AND OCEAN PLANT LIFE

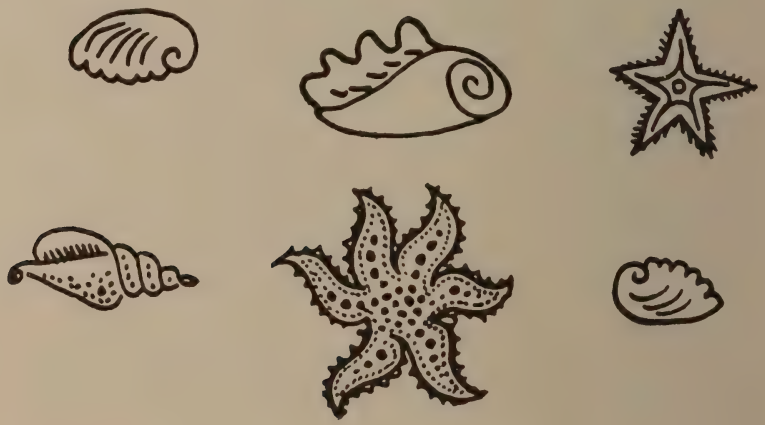
Two opposed S lines are used to design a fish. An all-over pattern of crossed lines suggests scales:



or use the half-circles to design scales, and vary the fins and tail:



Starfish and Shells:

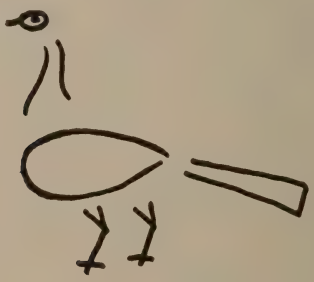


Ocean Plants:

PART VI

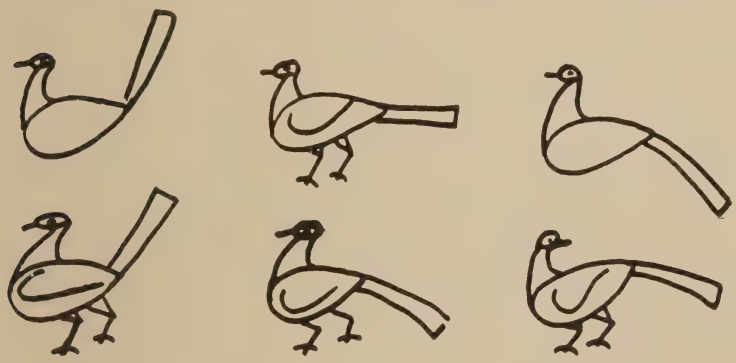
22. BIRDS

In drawing a bird, consider the body as the core of the design. The flexible members, head, neck, wings, tail, and legs, are drawn separately, and the motion of the bird is determined by the placing of these separate parts on the body.



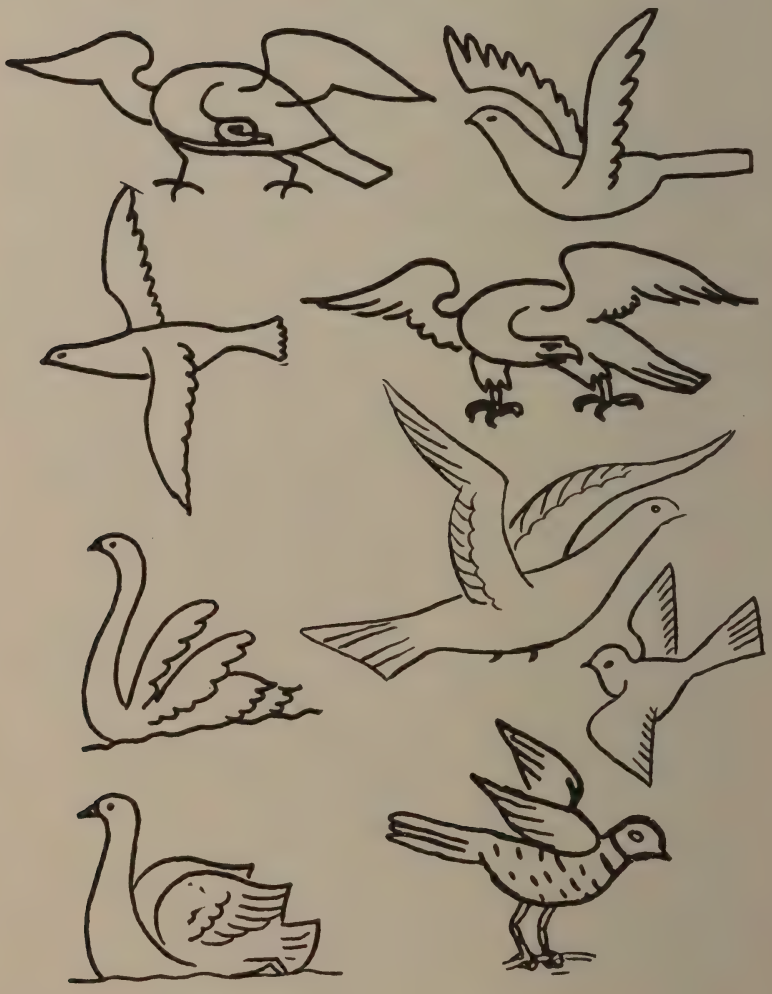
The body is egg-shaped and mostly immobile. Movement depends on the placing of the head:

and the position of the tail. The legs are a broken line.



Note the different proportions of each particular bird, and their various characteristics on an identical basic structure

When both wings are shown they must not interfere with each other, but must be clearly separated:



Bird-shapes:

23. COMPOSITION OF AMERICAN COATS OF ARMS

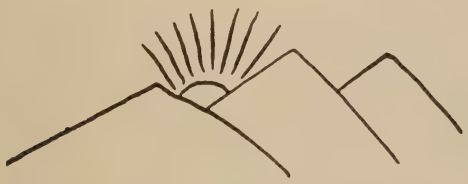
NOTE: These examples of traditional American art, as well as others which are reproduced in this book, are valuable to the student because they show the use of the seven motifs in the building of beautiful symbolic designs. The student should experiment as widely as possible with similar compositions of his own.

PART VII

24. MOUNTAINS AND CLOUDS

Mountains are drawn with the same lines used to represent shallow earth-surfaces, but with a deeper rise and fall of the curves.

For cone-shaped hills and mountains use the zigzag.



For clouds use half-circles, S lines, and scrolls.

25. SUN, MOON AND STARS

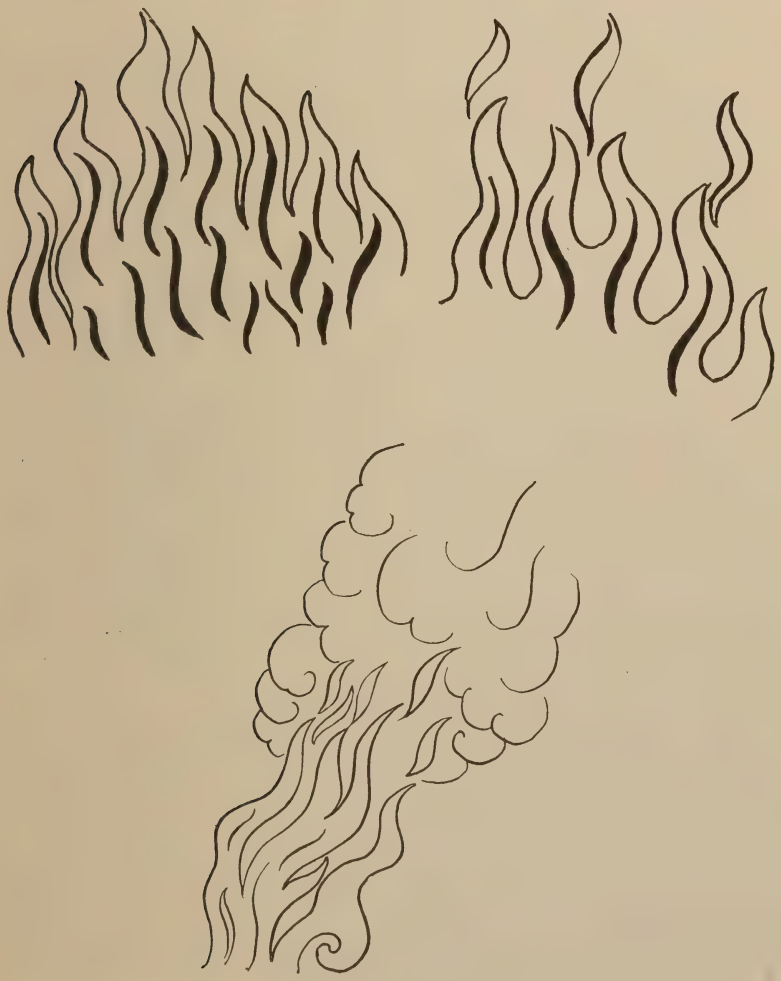
To draw the sun and moon with human faces is a very ancient and beautiful fantasy of design:

Moon, Stars, Lightning:

Flight of birds in all-over pattern:

26. FLAMES

Flames of fire sweep upward in wavy lines, scrolls, and S lines.

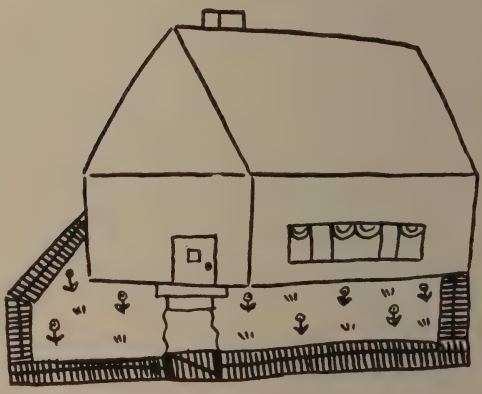


PART VIII

27. HOUSES

First draw the elementary lines of a house. The addition of a side tower makes a church.

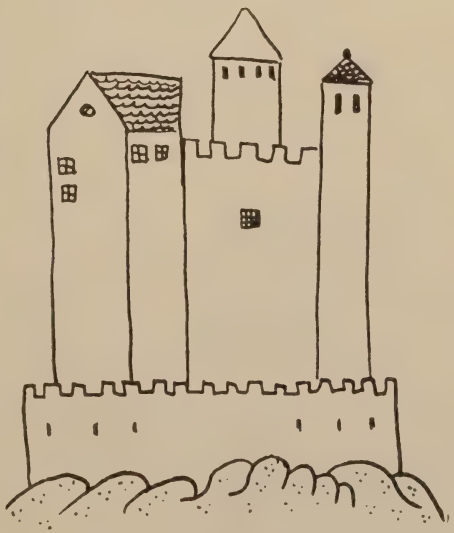
A cottage with a fence around it and a small garden:



American Colonial house:

A brick house:

A castle:

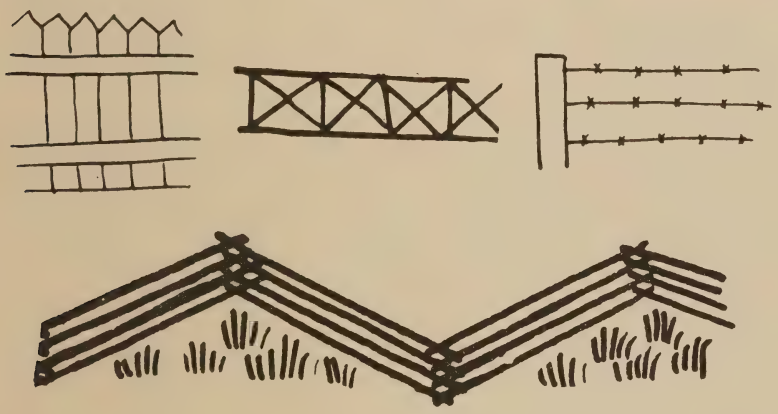


Experiment with different types of houses:

28. FENCES

The house enclosed with a slight low fence, the field enclosed with wire, are familiar scenes in American village and country life:

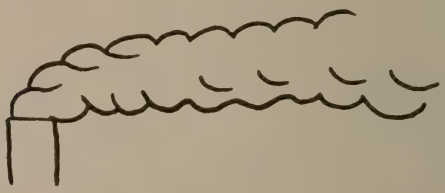
A few types of fences drawn with straight lines, or zigzag in rows:



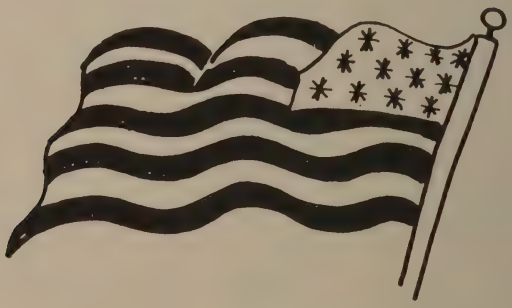
Kiosks and Pavilions:

29. SMOKE AND FLAGS

The lines of smoke are the same as the lines of clouds, but in smoke the movement is more rapid, and in a definite direction, as if blown on the wind:



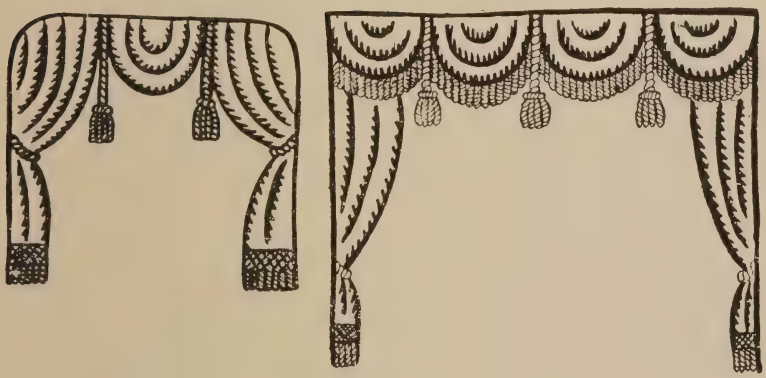
For floating flags, use the ribbon design:



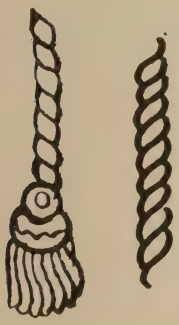
A pennant:

30. CURTAINS

The curtain is a variation of the garland shapes already shown:

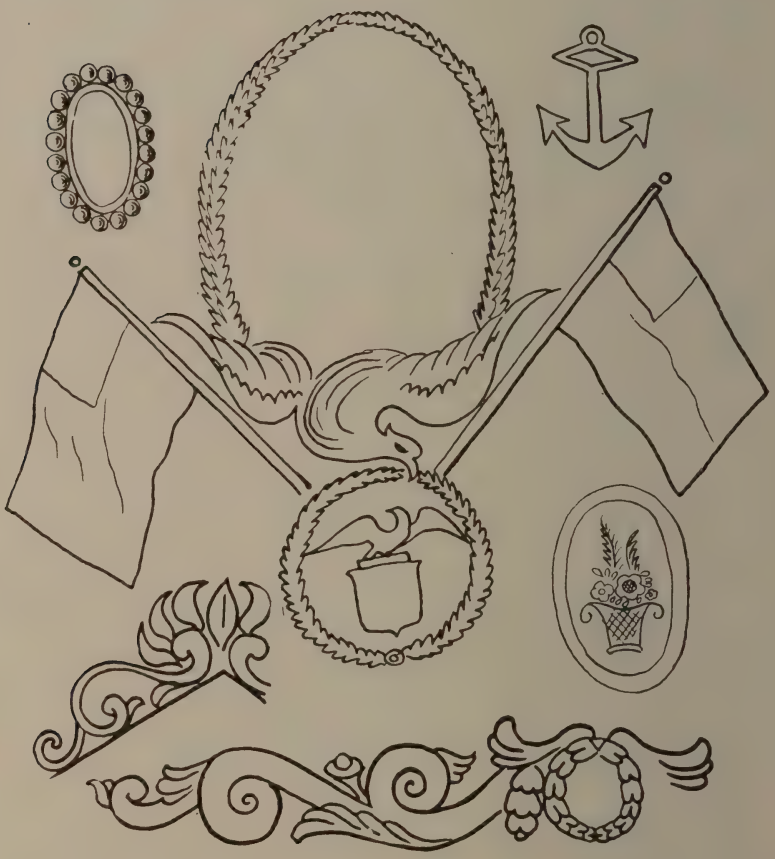


Tassel, made with circles, half-circles, and S lines:
Cord with S lines:



Fringes:

31. TYPICAL EARLY AMERICAN ORNAMENTS

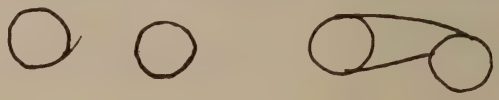


Typical Early American Ornaments

PART IX

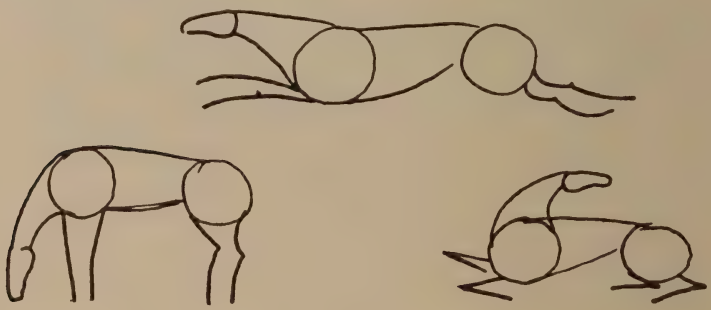
32. ANIMALS

All quadruped animal forms may be reduced in the beginning to one basic structure. It consists of two circles. Join these circles with two lines, as shown.



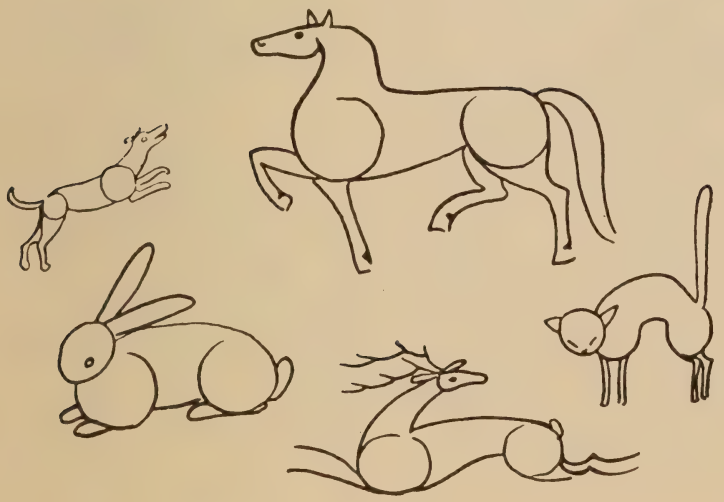
The position and movement of the animal depend on the placing of the neck, head, legs, and tail, as already noted in drawing birds:

Observe the different ways in which the legs and head may be placed on the same body to alter the position and movement:

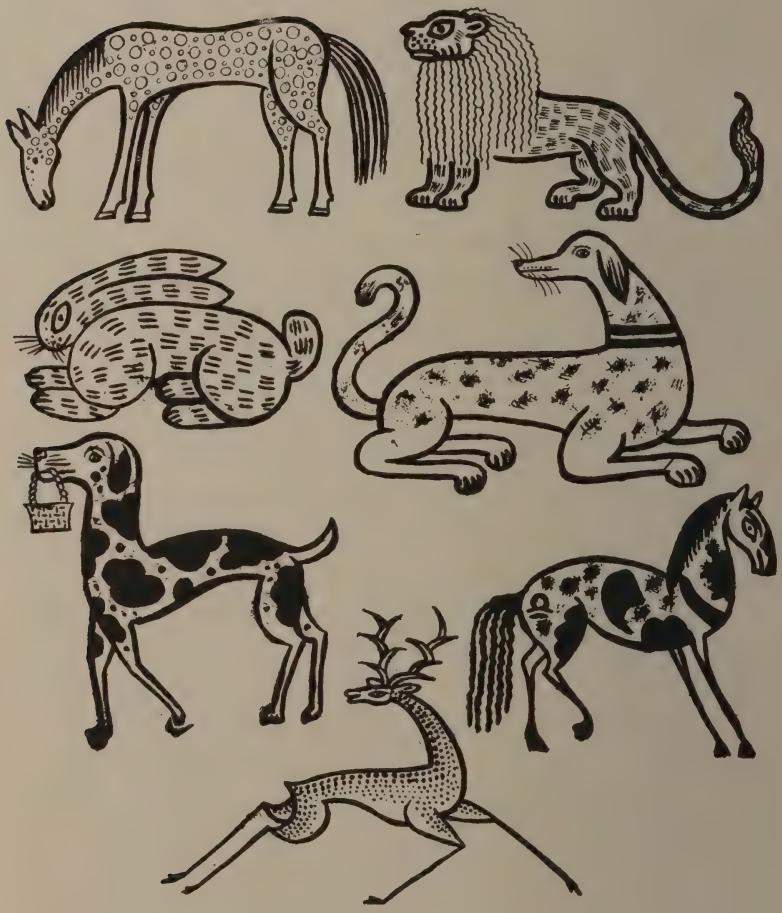


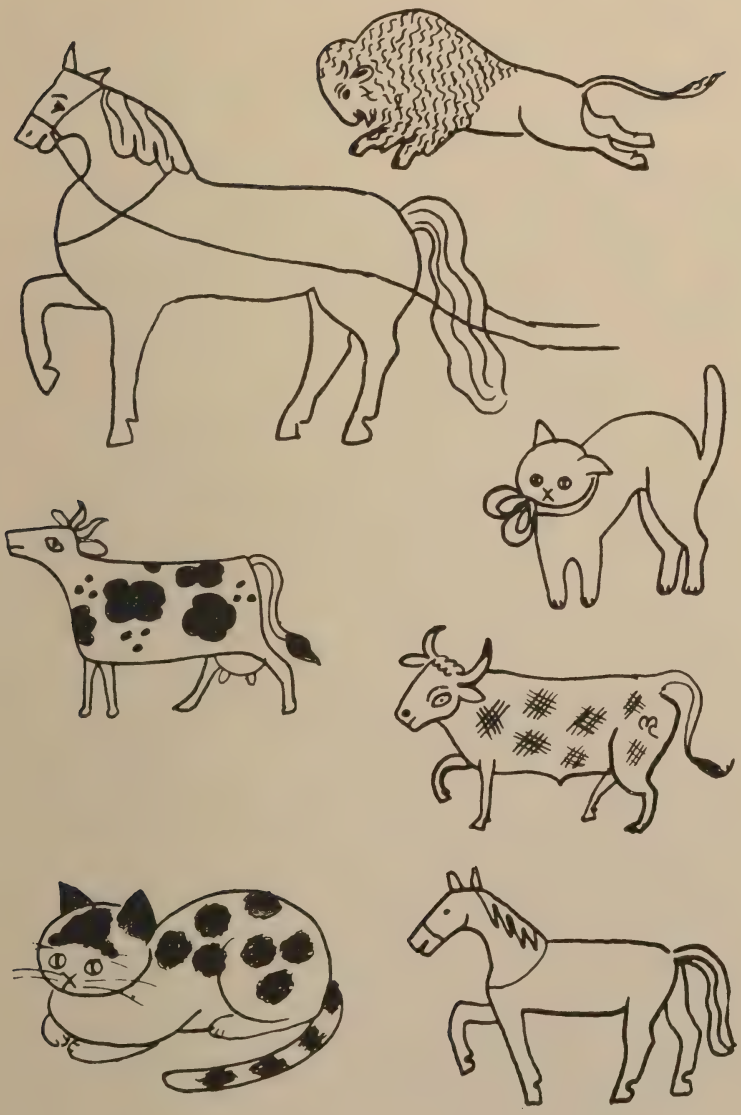
On this same shape which has been transformed into a horse, change the tail and ears, draw long thin legs and add horns to represent a deer:

Note how the same structure serves for widely different kinds of animals:



A few examples of animal design in very simple outlines:



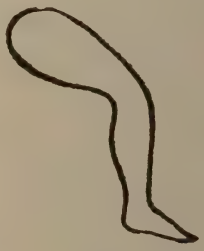


PART X

33. THE HUMAN FIGURE

The human body may also be divided into several parts which are, separately, very simple. It is better to begin this study, ordinarily rather difficult and complicated, by drawing only the most primitive outlines. The torso, or trunk, of the human figure resembles a basket standing on a circle:

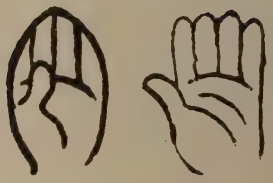
The torso:



Leg

Feet

Arm



Hands

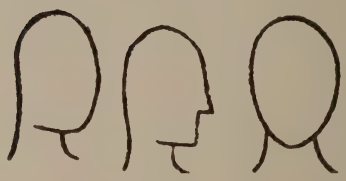
Now draw the lines of the human body in whatever position desired, but simply, as children do. Try these dancing and running figures:

Now attach to them the separate parts shown above. Let the legs begin at a point in the center of the circle:

Outline of woman:

Outline of man:

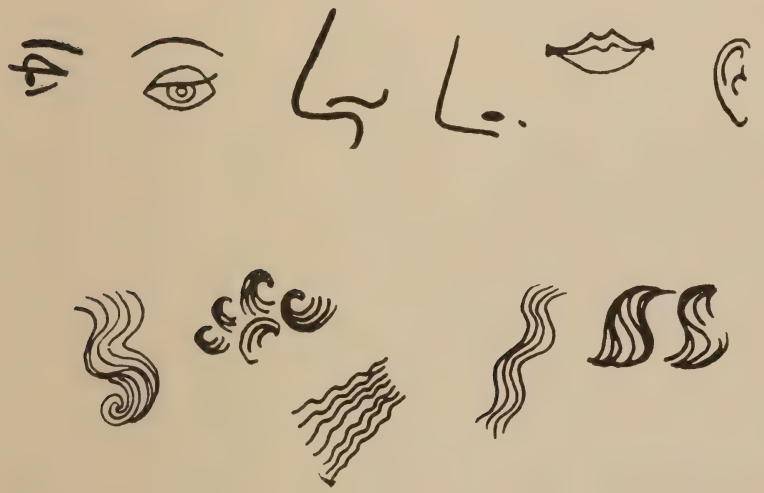
The head:



Head in front view, three-quarters, and profile:

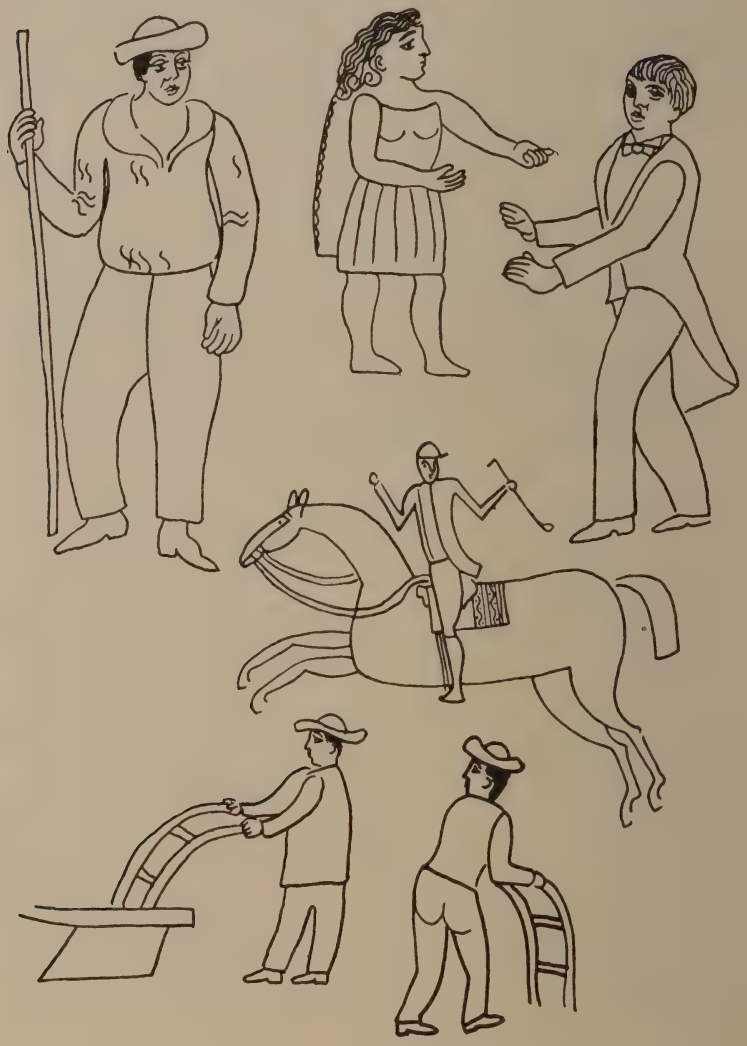
These heads are taken from early American ornaments, but many other simple conventions may be used as well. Note that the line which forms the nose and the eye-brow is based on the S form.

Parts of the face: eyes, nose, mouth, ears, and hair:



Try designing various other objects in combination with the human figure. For example:

Examples of the human figure clothed and in combination with other objects:



PART XI

34. COMPOSITION

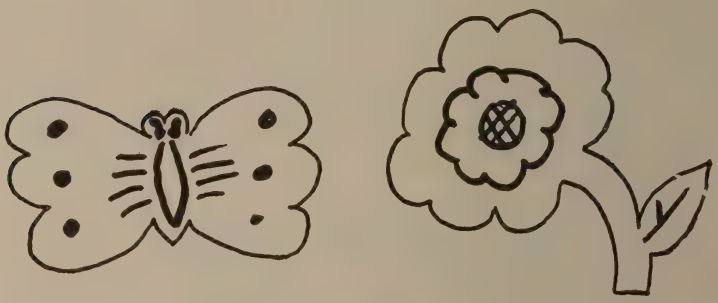
The student should experiment with combined designs containing the designs already learned. Note the composition below, which contains many elements in very condensed form:

DESIGNS CUT IN PAPER

For decorative arrangements on a flat background without perspective, the student will find that cutting paper silhouettes of his designs and pasting them on the

background will greatly simplify the early problems of composition, and this procedure will prove very valuable as training.

Select a number of designs already familiar, such as birds, butterflies, or flowers:



Cut them all about the same size, say three inches square, decide what size the composition shall be, and work on a flat surface. After the larger figures are placed, fill in with smaller bits of single designs. All-over patterns may also be used.

This is an interesting way to practise composition, and the changes that suggest themselves to the student are more easily adaptable than they are in drawing.

Do not consider either proportion or perspective at this stage. Place the figures where their shapes blend most harmoniously with each other and with the whole design. The effect should be similar to that of printed silks or cretonnes, in flat design on a plain background.

Composition must be creative. Keep always in mind that original designing forbids a mere copying from life, and that the artist is not limited only to possibilities in Nature. In design, the artist is free to draw a butterfly larger than the tree it hovers over, or a bird and a house of equal size. It is only important that the finished composition be beautiful and right, the result of an honest mood and a careful plan.

Preserve the spaces between each unit of the design; do not crowd or overlap them in any way.

Crowded and incorrect spacing:

Proper spacing:

Having assembled a great number of subjects and elements to work with, the student will now be able to represent his ideas first in a simple decorative design.

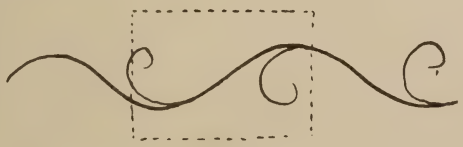
There are no fixed subjects to limit inspiration. The student is free to follow his imaginings into fantasy, dreams, legends or fairy tales, if he so chooses. He may record his impressions of actual life, of his surroundings, of street scenes, of the life of the city, the country and the seaside, either from actual view or from memory; and he should do this without regard to any pictures he may have seen of similar things. Let him rely on the method of design he is studying, and on his own individual use of the things he knows and feels.

The unit of a design has its individual value, certainly, but the important consideration for the moment is harmony of composition. Whatever idea or emotion the student wishes to express should be contained within a limited number of elements of his own choosing; the important problem is then the way in which it goes into the picture, the form of its arrangement within a certain allotted space.

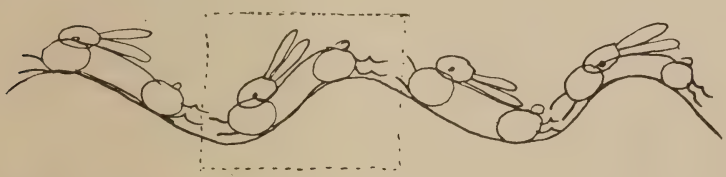
In making his own compositions, the student has an opportunity to use all his previous training in an original way. A border or an all-over pattern already familiar may be very helpful as the skeleton of a new combination.

Take for example a composition having as its subject a leaping rabbit. The rabbit leaps forward in long curves, and this is best suggested by the use of the wavy-line motif.

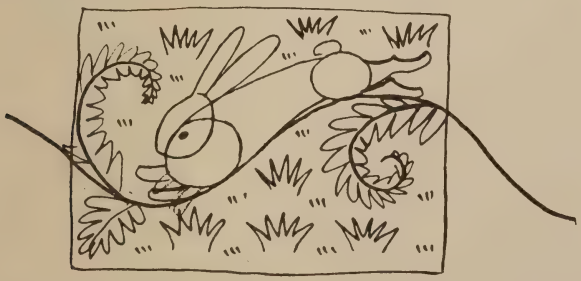
This motif has been drawn many times in previous lessons, combined with scrolls, circles, and other motifs. Thus, we may take the simple border as it stands and use a small part of it.



The rabbit may be placed at any given point of this line, following its curves.



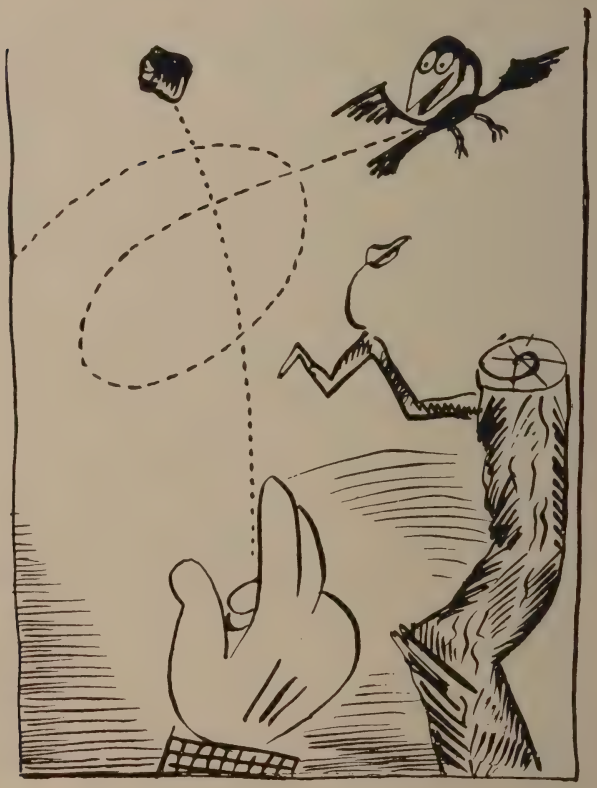
Now choose which position the rabbit shall occupy, draw that part only of the curved line to the full size of the intended design, and arrange all the rest of the drawing in harmony with this ruling line.



In case of designs built upon simple growth, not representing actual movement, but using for example, a shrub or tree, the same rule is applicable, not as motion but as growth.

Study the composition of the rabbit for its movement. Note that the effect of movement is dependent on a ruling line. This main line of the composition is called the *dominant*, and the supplementary parts are *subordinate*. The subordinate lines must never obtrude, they must support and be in complete harmony with the main line or lines. Adapt the leading unit or figure to the dominant line, and group the lesser ones in the order of their importance.

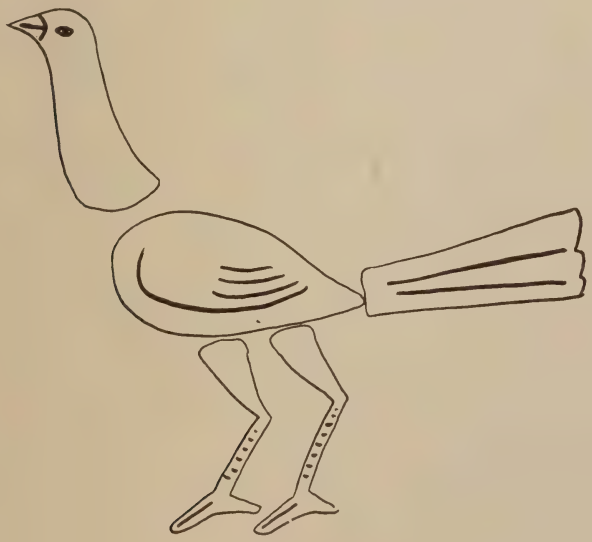
If the dominant unit is to represent the movement of



a running animal or a flying bird, then the dominant line directs the orbit or path of the flying creature in its flight. This line is used in a very obvious way in the comic-supplement pictures, where a dotted line represents the track of a look, a leap, or an object thrown in the air.

To get a greater effect of movement, or swing, to the composition, the silhouettes which were used at first in the study of composition should now be cut in their separate parts, and their positions adapted to the requirements of the design, precisely as was done in drawing them. This method applies to everything from the human body to flowers, leaves, and stems.

For example, cut the silhouette of a bird into all its parts:



SPACE AND MASS COMPOSITION

When working directly in areas instead of in lines, the background is as important as the mass of main design.

In compositions which do not suggest motion, make nearly the same arrangement as for all-over patterns. The elements must cover the entire composition in a true balance; draw the more important designs first, and fill in the spaces with the smaller ones, remembering always to leave some space around every object, whether large or small. They must not touch one another. This free space may be painted plain black, which makes a very decorative effect.

Observe in the above composition how the darkened spaces between the units of design must also be considered as masses necessary to the pure balance of the structure. Perfect structure cannot be achieved by

rules: the student must be guided by his natural sense of equilibrium.

We have here given suggestions for the most simple methods of composition, but in time, the student will be able to plan other compositions, more complicated, which will be merely decorative and free representations or illustrations of ideas of his own.

35. COLOR

Up to this point the work has been done with pencil, in black and white. The next step is to learn the use of color.

The art of color is a study not to be dealt with here to a greater extent than is necessary to give the student a few hints, to stimulate his imagination, and allow him freedom for his own compositions without suggestions or the interference of special rules. Let each student develop his individual feeling for color, for this is one of the most important aids to originality and honesty of expression. The student who perseveres and becomes an artist will naturally take up the intensive study of color as a part of his work.

There are for the present no special rules for combining colors. In this method the colors at first are never mixed. Use the pure shades as they come in the ordinary school paint box, and try them in succession in all the combinations that occur to the color sense and are pleasant to the eye.

Crayon is the simplest form of color to use, and younger students usually prefer it, but it is advisable

also to learn from the beginning the easy use of brush and pen. For this reason they should be encouraged to work in water colors and India inks.

For the trial of this new medium it will be well to repeat some of the designs already learned, such as rosettes and borders, in color outline.

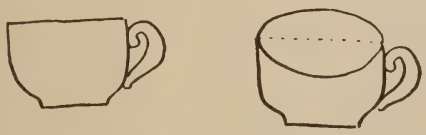
Begin with outlines in color, and progress gradually to full-color compositions with backgrounds. From this lesson on, the work should be as much as possible in color.

PART XII

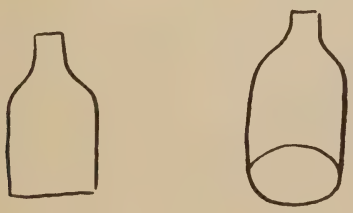
36. PERSPECTIVE

So far all objects and figures have been dealt with in flat profile, silhouette, or full front view, without reference to their bottom or top surface. They will now be represented and described in perspective: not the usual perspective in art, with the receding lines converging to a point on the horizon, but a much simpler one.

An object seen in front view from above naturally shows its upper surface, or, as with a cup, its inside surface.

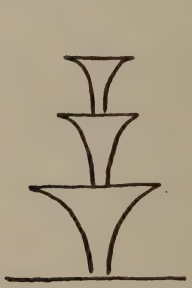


An object seen from below shows its base.

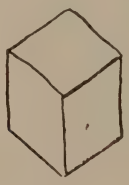


Round objects such as vases and baskets which have previously been shown only in profile or silhouette are

now shown combining the profile outline with the top or base in perspective.

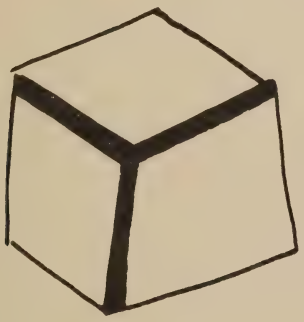


This method applies to round objects, but those having several sides must be drawn in perspective to show the right-side face, the left-side face, and either the top or the base, depending on whether the object is viewed from above or below.

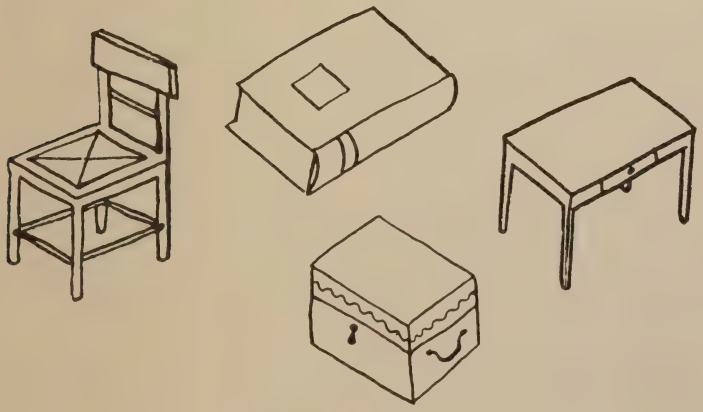


Three of their sides are thus actually visible, giving a full description of the subject and an idea of its volume.

Diagonal Y shaped lines are mainly used in perspective.



Following these simple rules, practise drawing in perspective all the designs hitherto done only in flat surfaces.



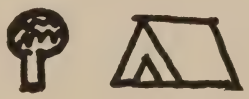
37. DISTANCE

The simplest way to represent distance is to diminish the size of objects as they recede one above another into the background. This sense of distance is obtained by drawing on planes.

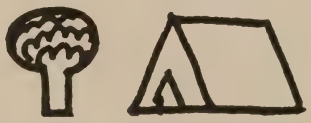
All the nearest objects are the largest in size, and appear together in the first row, or plane, at the bottom

of the composition. The objects on the rising planes gradually diminish, keeping proportions among themselves in the same plane. For example, a composition of tents and trees in perspective:

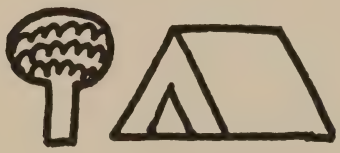
Third row, background:



Second row, middle distance:



First row, foreground:



Children, exactly as primitive man, always represent objects in the distance in the upper part of their designs and objects nearby in the lower.

38. SHADING

The representation of depth and volume of objects is obtained by shading, that is, by distinguishing between different planes by an arrangement of light and dark. Darkness suggests depth in relation to the light, or outstanding parts.

To impart volume and roundness to an object, begin the shading inside the outline of the figure, almost, but not quite, touching it. The shading should be very dark at the edges and grow lighter towards the centre. (Fig. A.)

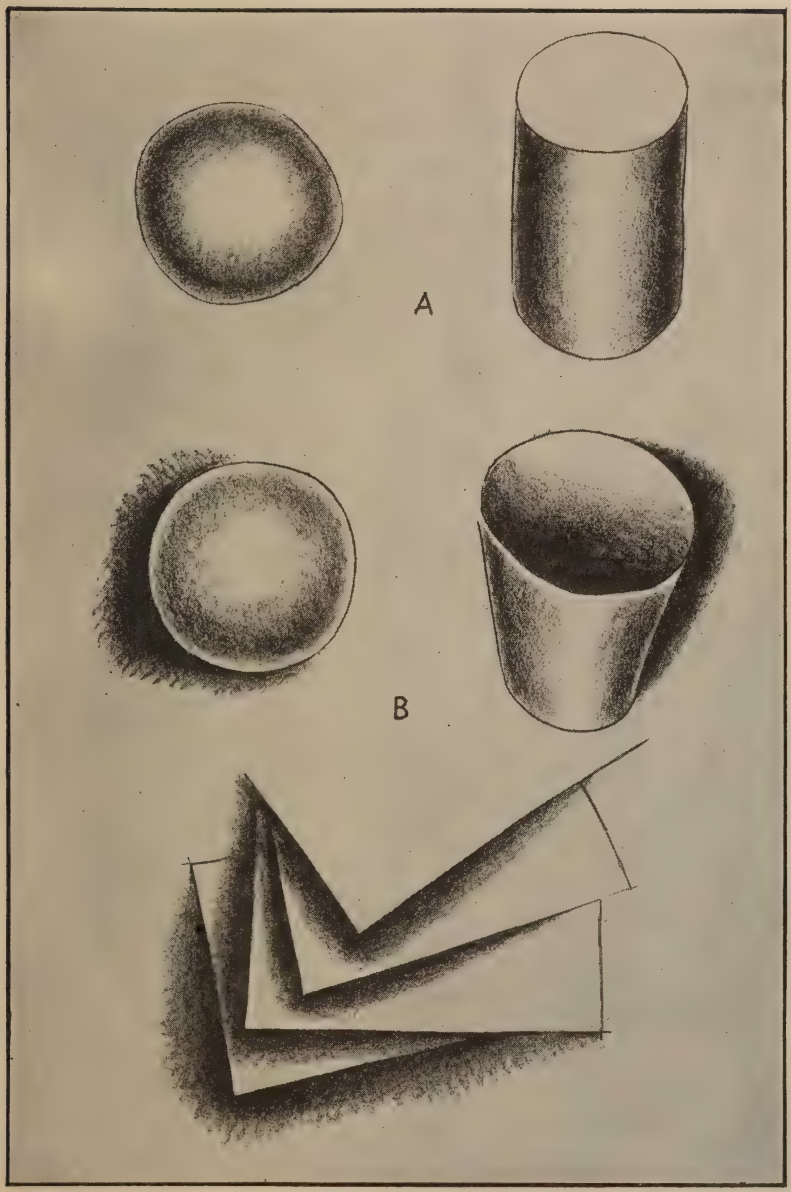
To suggest depth around a figure, shade very dark around the outline, then fading outwards. (Fig. B.)

When objects have flat surfaces, emphasize the edge between two breaking planes with shading starting from the angles. (Fig. C.)

Note that the vase in Fig. D is seen in perspective from above and that although its base is almost a circle in outline, an effect of its flatness and the relief of the stem are obtained by shading on both sides of the stem.

In the fruits shown in Fig. E, observe that the apple is shown to be round by means of the circle of darkness which follows its contours, just within the outside line.

This method of shading, not being a realistic representation of a direct light, is the simplest way to achieve the desired effect and gives the feeling of a diffused light.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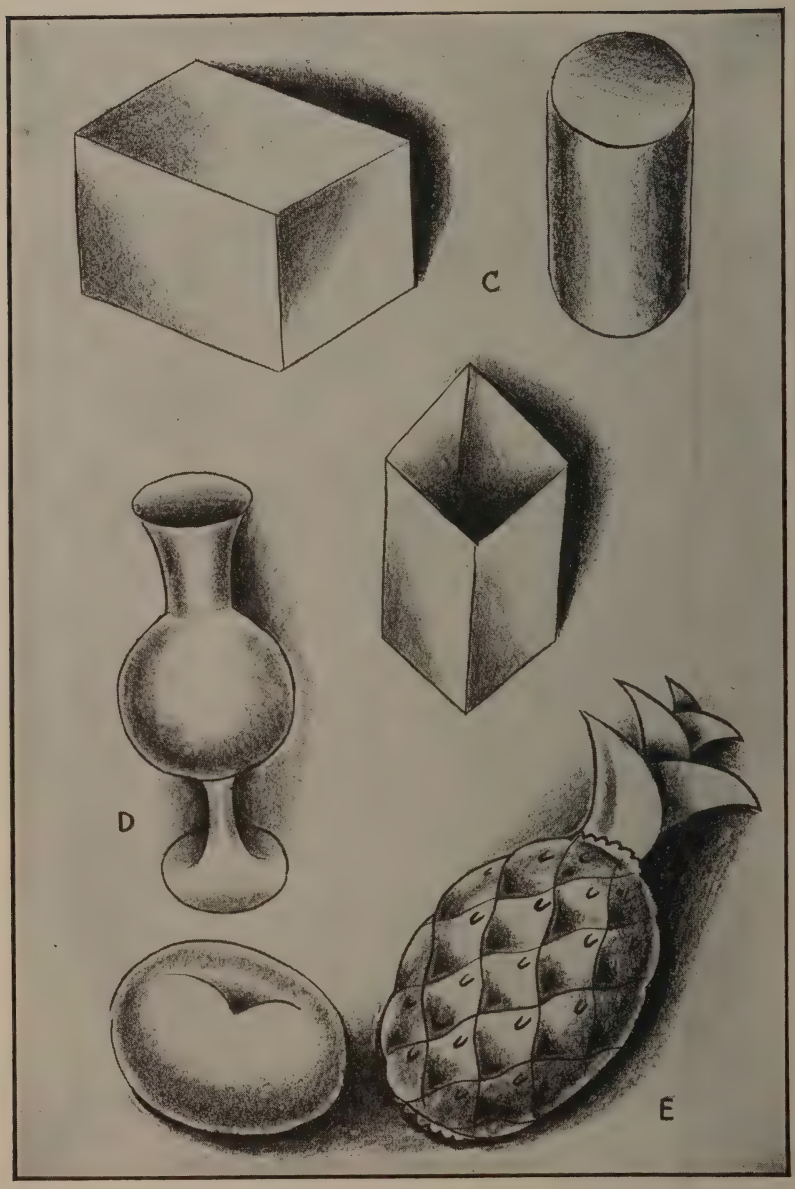
B


C
D
E

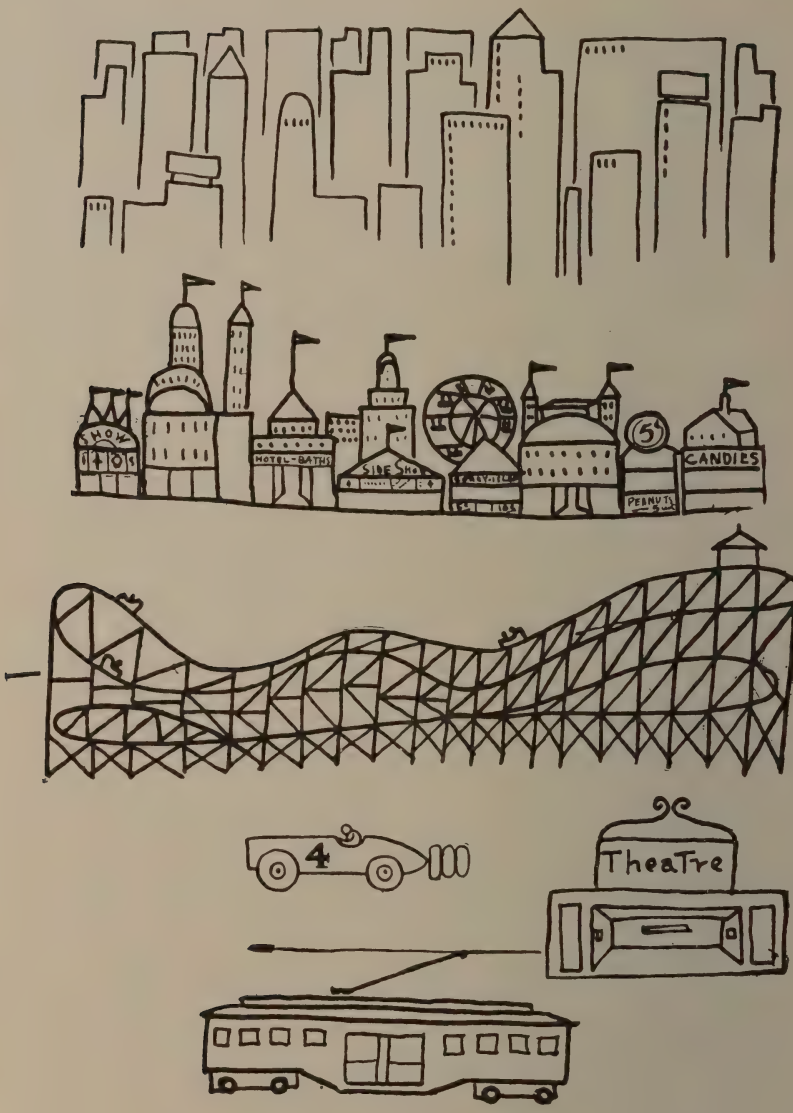
PART XIII

39. MODERN SURROUNDINGS

The student should observe the modern life about him, and draw what he sees reduced first to its utmost simplicity of expression.

Choose whatever lies near at hand or catches the imagination. The list given here will suggest some of the numberless subjects to be found in actual surroundings, and the examples given will be helpful in working out the problems of perspective, of distance, of composition and simplification:

Airplanes
Amusement parks
Automobiles
Boats
Bridges
Building cranes
Camping tents
Casks
Circus
Cups
Electrical appliances and machines such as:
  Electric bulbs
  Radio set and wire coils
  Radio towers
  Telephones
  Trolley cars
Engines: Railway locomotives and fire engines
Factories
Flags
Household objects
Public buildings
Ships
Skyscrapers
Theaters
Etc., etc.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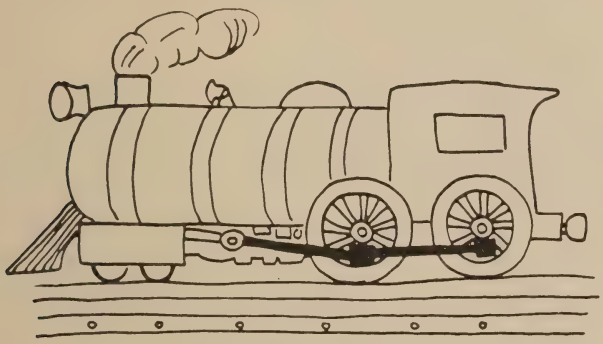

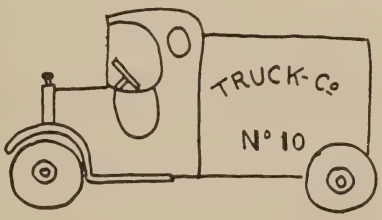
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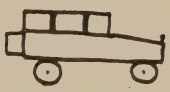

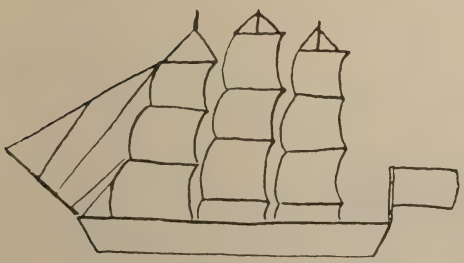

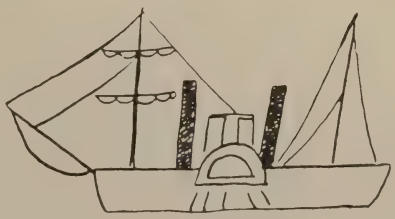

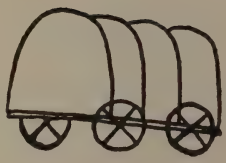

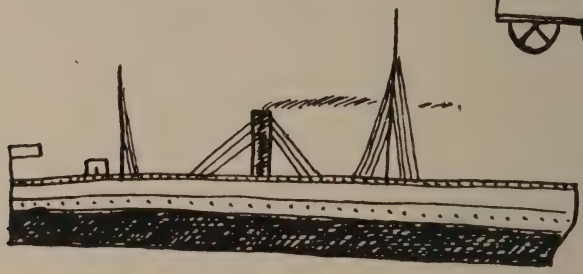

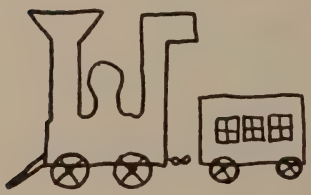

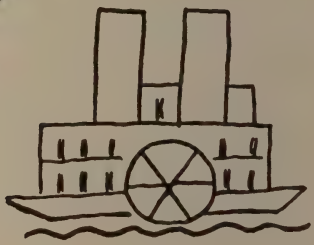

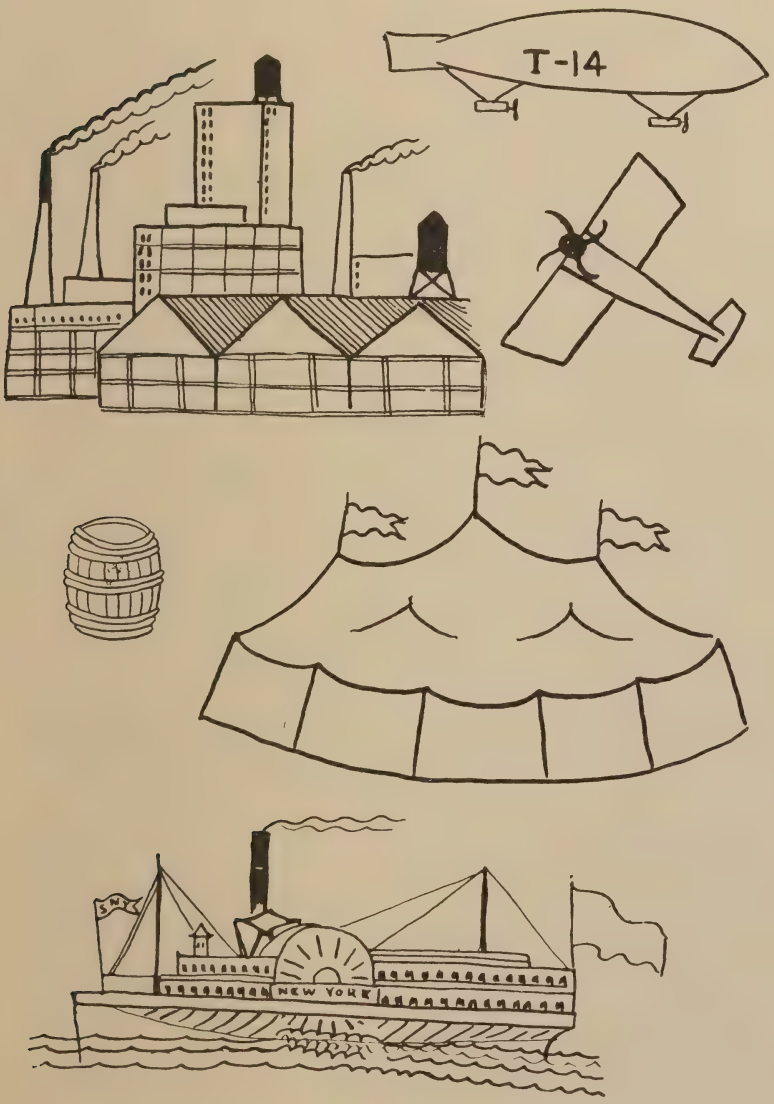
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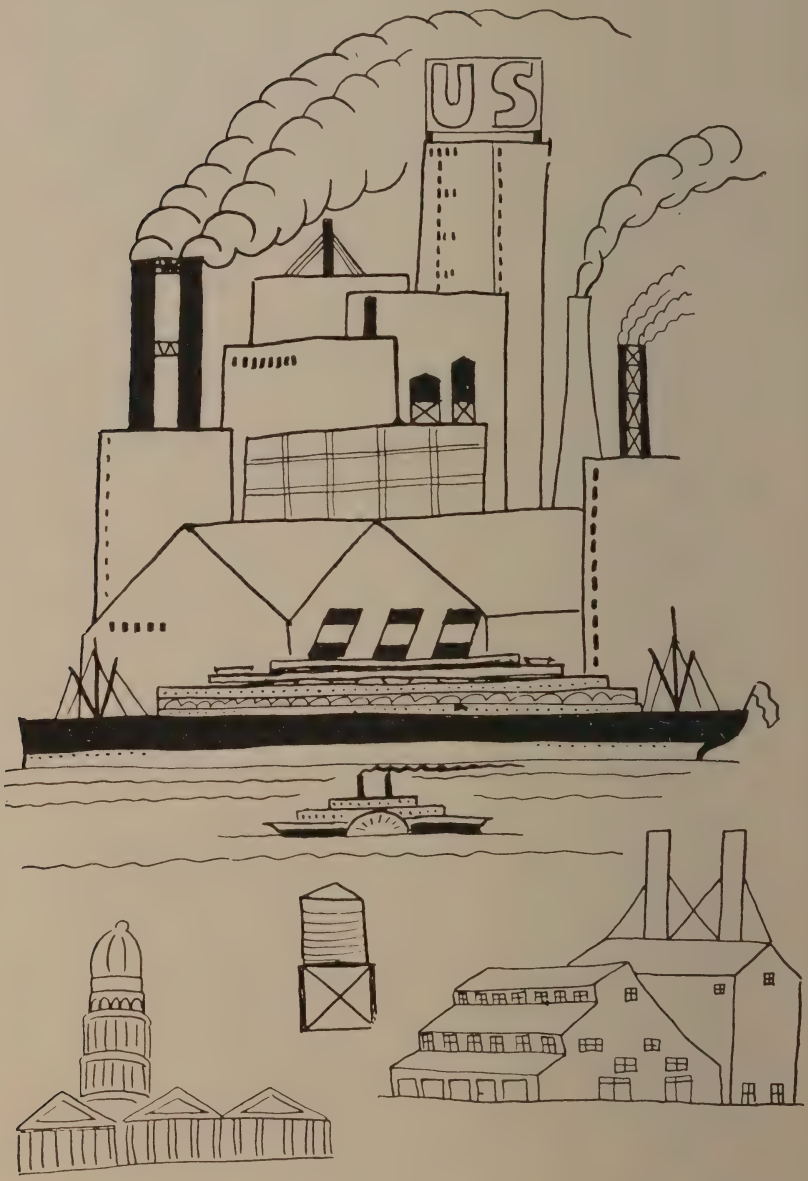
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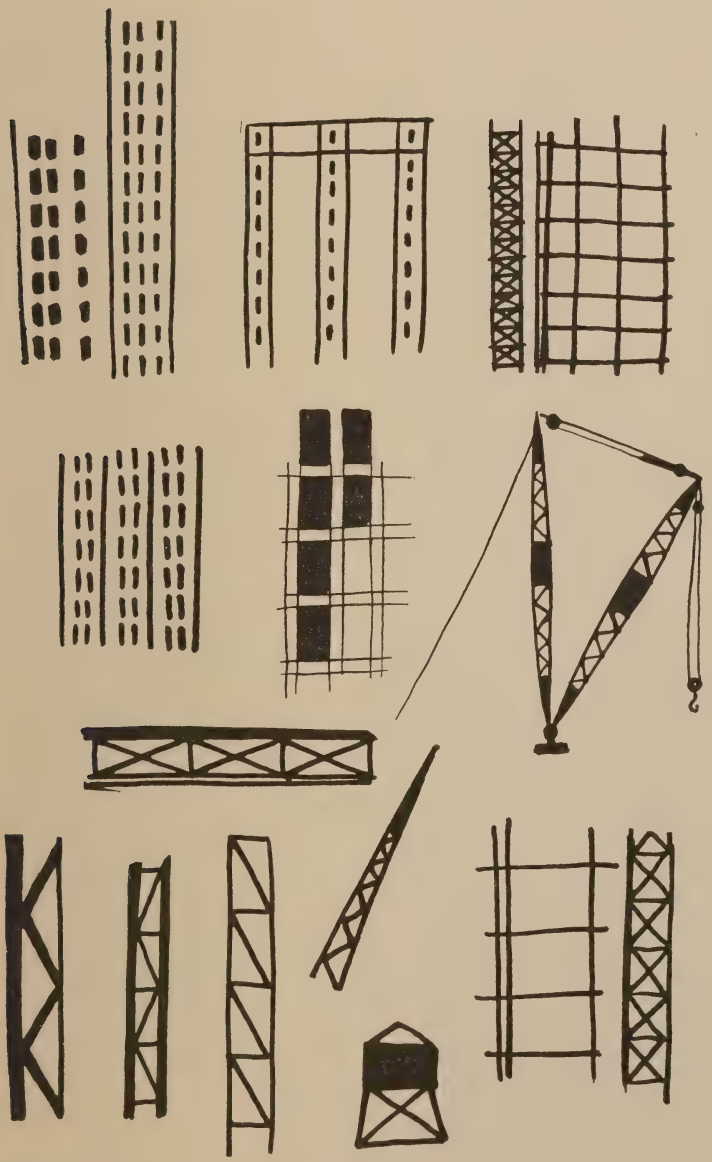

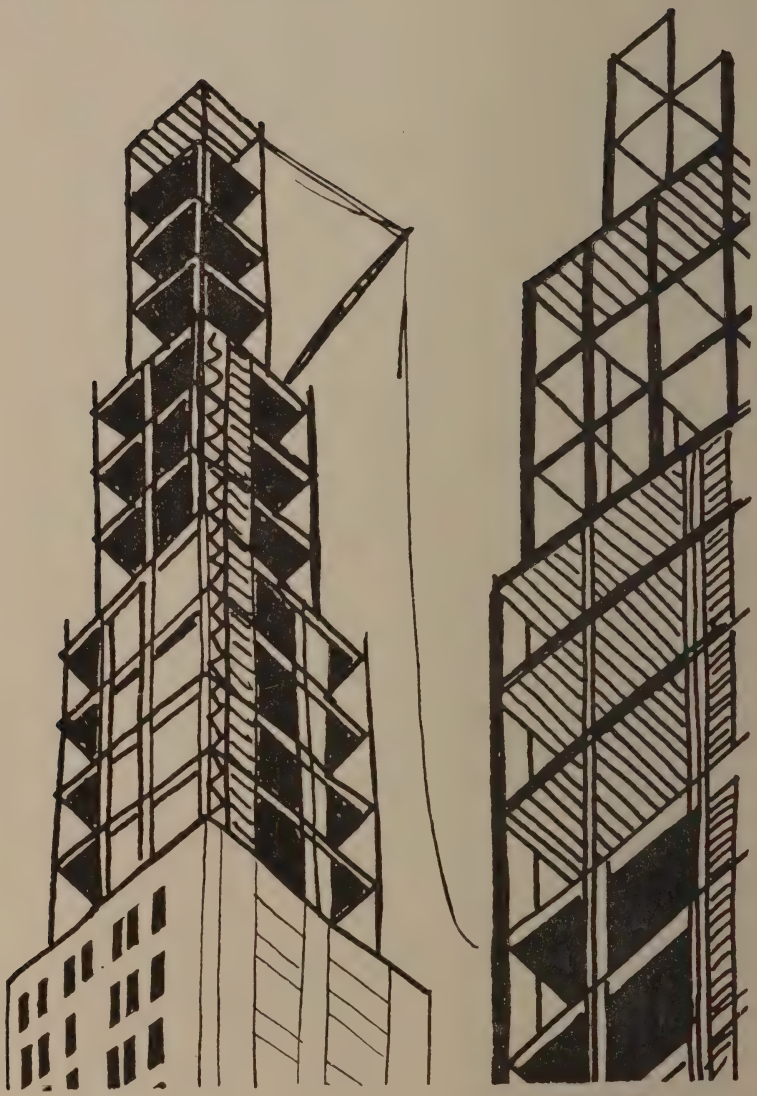

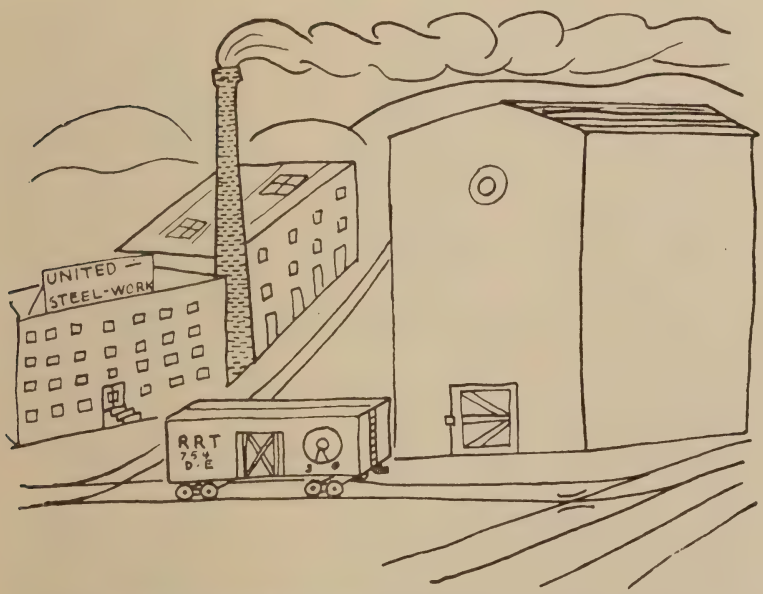
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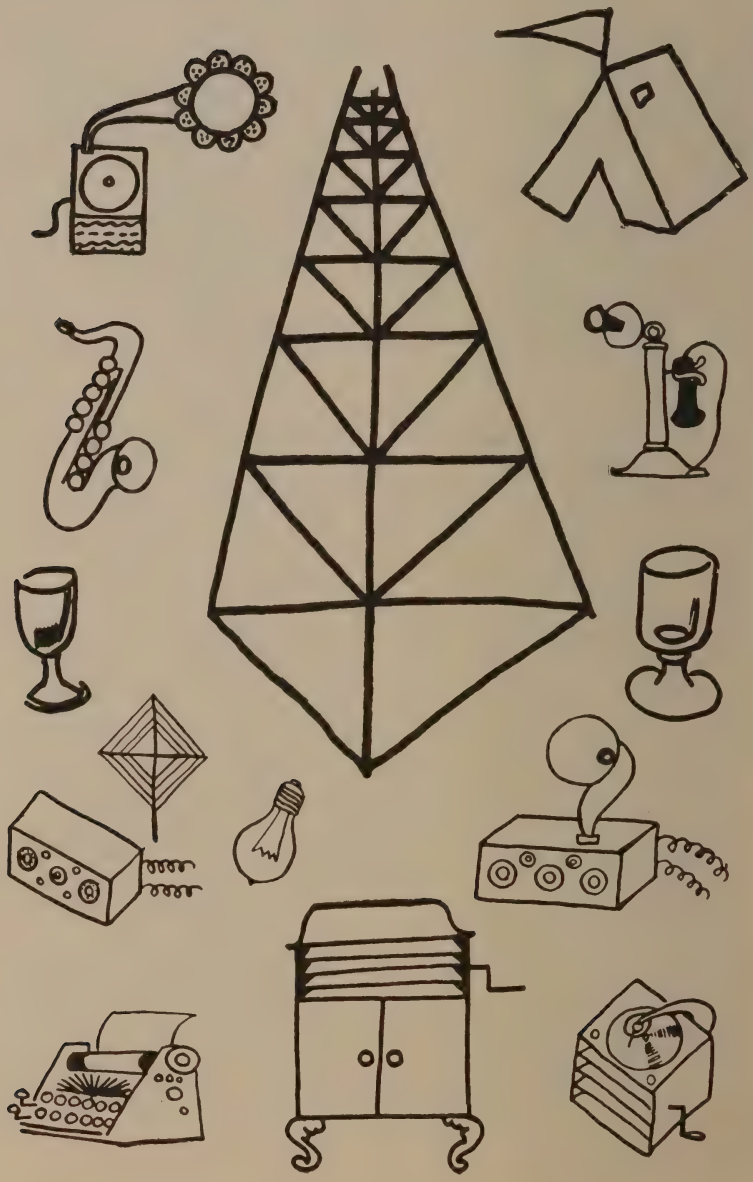
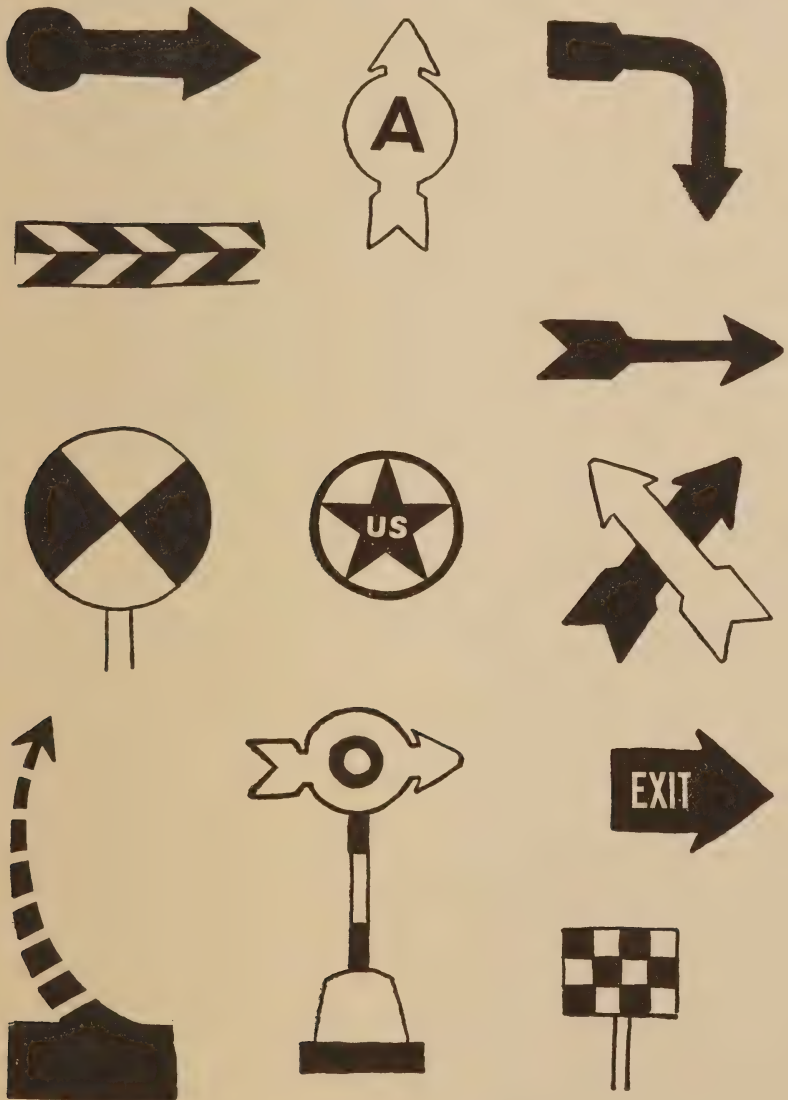


It must be remembered that the beauty of most modern forms is the result of the exigencies of their



use. It is the result of the quality and texture of materials, the fitness of their application and the necessities which determine their form rather than of any deliberate striving for ornamentation or so-called "artistic forms." For this reason, many of our modern surroundings have much of the quality of primitive art and as such furnish us with new examples of the old forms adapted to a new culture and a new conception. The use of the arrow in modern design is a good example of this development, as the accompanying drawings will illustrate.

This method for design, the first part of which ends here, has thus far been concerned only with the simplest exposition of the rules and principles to be followed, and as such it can be used by all elementary students of the art of design. The second part, addressed to teachers and advanced students, is the explanation, in greatly compressed form, of the main theories underlying and justifying the method. In other words, the first part shows *how* things are done and effects are achieved; the second part explains *why* they are so done.

BOOK II
CREATIVE IMAGINATION

PART I

THE DEVELOPMENT OF CREATIVE IMAGINATION

The particular aim of this system of design is to provide a simplified method of graphic art for the expression of ideas and emotions, to help the student to avoid meaningless effort and waste of vital energy from the beginning, and above all to set him on the way to solving his own problems. Its happiest feature is the simplicity and rapidity with which it removes obstacles, and gives the student a sense of progression from his first attempt to draw. This is because it is a stimulant to the imagination and to the creative forces rather than a textbook of exercises. The aim is to establish at once an understanding of the fundamental laws of order, growth, rhythm, harmony, and balance, to which all life is subject, progressing gradually to less abstract forms, with a study of simple, general designs, inspired by nature, but conventionalized by many generations of human expression.

In training a child, then, the first step is to free him from timidity by means of a flexible craftsmanship, in order that the expansion of his ideas may be encouraged by perfect command of method. On this foundation he builds up his own style, his inner point of view, and evolves, through his own experience, into an individual capable of finding his proper material and making the fullest use of it.

These suggestions for the more important forms of traditional design will provide the student with a knowledge of the essential forms of expression of the past. Let him recognize that this must be his starting point, from which he may enter into a whole new world of fresh endeavor. He must at first use the suggestion of old form to clothe the new concept, until he is able to create forms of his own.

All popular expressions of art are the fruit of a collective ideal; national collectivity is necessary before there can be unity in the national art. In the future, popular arts will gradually become conscious: it is not enough to know that certain things are done in certain ways, the members of the group will demand to know also *why* they are done that way. A knowledge of form and a solid technical equipment are the first requisites for any work in the arts; add to this, understanding of the origin and meaning of form and technique, and the way is cleared for true creativeness.

All good work in art originates in a lively and vigorous imagination working with freedom from prejudice and with a spontaneity gained from the liberated play impulse. This enthusiasm and pleasure give warmth to creation, which is guided and attained by intuition. It is the boast of certain kinds of artists that they do not know how they get their results — that they are driven by what they call "inspiration." True art, however, has to be conscious, otherwise it lacks those necessary qualities of high sincerity and the expression of a feeling, accurately defined and clearly understood. Such art can be produced only by those who have full control over their creative impulse and who act always with a clear comprehension of its causes. On the other hand, complete sincerity in ex-

pression may also be attained by the savage, acting in absolute unconsciousness and guided only by mere instinct.

The work of art may show these qualities in two ways: at the one extreme stands the primitive, or the child, ignorant, even, that art *exists*, and expressing himself in artistic creation without prejudice or knowledge and acting purely under the guidance of instinct; at the other extreme, is the highly civilized man whose expression is impelled by neither prejudice nor uncertitude, because he *knows* and is master of his knowledge. Between these are the stages of struggle, development, experimentation and experience until sufficient knowledge has been attained to allow for complete consciousness and freedom of action. The primitive method may be called instinctive or emotional, the civilized either intuitive or conscious.

The failure of this high faculty of reason limits the peasant arts. The uncultured artist-craftsmen of all times followed their instinctive processes: they created unconsciously from the heart, with tenderness and naïveté, and the appeal of their work is limited to the heart. They gave unreasoning response to their feelings, governed by their immediate needs and the limitations of their environment. That their motifs of decoration could be analyzed, that their work was ruled by certain laws, never occurred to them. No matter how touching their art may be as a record of human aspiration, it is not a complete art because it lacks the quality of the higher expression, the quality of being conscious.

In art, as in all other manifestations of the human spirit, our mind grows steadily more conscious, in this enlightened sense, more critical in its use of traditional materials, more analytical for the sake of a fuller un-

derstanding: emotion is not the master, but the ally of intelligence. This makes a balance. It is all very well to feel rhythm, harmony, growth, but feeling will carry the artist only a certain distance. These instincts are shared in some degree by every living thing. Without knowledge of the principles ruling these instincts, it is impossible to reach the fullest degree of creativeness.

When we consider human development, it is clear that for thousands of years the unconscious goal of mankind has been to give plastic shape to its emotions and concepts. This prolonged, blind, and diffused effort has created many forms of art, all of which evince a similar striving: the will to express beauty (rhythm, harmony, order, etc.), that sense of beauty common to all races and times, however varied the surface forms it may assume. In all ages, the artist has taken hold of the idea of his time, wrought upon it all imaginable shapes and passed it on to the succeeding generation as indestructible evidence of the true nature of his times.

The growth of this evidence corresponds intimately with the development of all human perception: as the perceptions grow more keen and subtle, man gains a more luminous knowledge of his ideas; as the ideas increase, he gives them surer definitions. Through study of the primitive arts we can trace the long course of this growth, thereby comprehending with more sympathy this clarifying process of the human spirit. The best guide for our own experiments is this understanding of the law ruling the creative impulse of the primitive. For basically it rules us also, and will command the future. We must choose either to abide by it or to disperse our energies without profit.

It is the intention of this method of teaching graphic art to return to the sources, to begin with basic symbols,

and little by little to establish in the mind of the student his own sense of, and his kinship with, these laws: he is the natural heir of all the stored wisdom accumulated in Time, and he can better use his heritage if he knows its boundaries. For the child and the novice in art, it is a new approach to the past, a more personal way of appreciating his own formula. He is a composite product, a present projection of an endless tradition: on his present possession he must build up his future. The past is an apparently formless body, carrying in it all that we are, our knowledge and experience, and all that we may draw upon to strengthen our own contribution to the present.

This knowledge of art is one of the keys to the mastery of life, a consciousness that is beyond mere sophistication. Children should be early persuaded not to confound creative art with mere realism, but to identify it as reality; to recognize it as a special, enlightened way of seeing and defining; and this way must be their own, not imitations and copies of the visions of others.

In the usual method of teaching design, the child is started too far along a road which is never his own; he does not begin at the beginning. By this method we are careful to provide the pupil with only the materials and suggestions necessary to stimulate him to discoveries of his own. By putting him in the proper environment and giving him the general principles, we help him to find his way through his own experience, the only experience he can possibly use to any fruitful end.

This method is thus in harmony with the true ideal of pedagogy, which aims to provide a synthesis of human experience in the realm of ideas, and its results as they are visible in the culture of the present. This should

be accomplished with the least expenditure of effort, while developing the student's energies and enthusiasms for use in his further explorations. This textbook is designed to rouse in the student his natural desire for participation, for creation and discovery in the limitless world of art. By its simplicity it hopes to forestall self-consciousness. A child, a student, should be a pioneer, an adventurer in life, and he will be, if only his young curiosities are not early smothered with artificial formulas, the workings of his imagination not curbed by fixed rules.

The manner of approach to art is common to primitive peoples, to children, and to beginners in the art of design. Especially in the case of the child, we find that a sophisticated design will confuse him, or fail to interest him. For this reason it is fatal to burden the novice with the task of literal copying from objects. He is lost in the struggle with sophisticated form, volume, perspective. Given a few principles and left to himself, he starts more simply. His first drawings are flat, primitive, naïve, alien to some persons with a fastidiously cultivated eye, if you like, but they have a beauty of their own, because they are right for him, it is the seed that will grow. He must pass through that stage precisely as he must cut his teeth, before he is prepared for any further advancement.

It is useful for him to learn early that there are seven basic motifs underlying all forms of art, and that these symbols are the shapes of primitive expressions of art. Once he learns the fundamental representations shared by all animal-shapes on earth, among all animals in their kind, all tree-shapes in theirs, all earth-shapes, he will have disposed of his first great problem, of seeing clearly into the core of the forms of

representation. Having got the structure straight in his mind, the way he covers it is his own affair.

Art should be a social function, a collective popular expression. In proportion as it becomes a part of everyday life, the concern of everybody, it grows in meaning and power. In China, in Greece, in Egypt, and other countries where there has been a vast underswell of popular art, we find the most profound expression of a genuine national culture. This culture consists of numberless elements brought together and fused by the fire of national consciousness; without this consciousness art loses its character, or, rather, fails to develop one, and remains untempered and lifeless.

In the Americas, this welding process has been going on for almost three hundred years. It took some time for the imported elements to acclimatize, before they could begin to mingle with each other. Surely more diverse cultures were never brought together than in this new world. The old native Indian civilizations of Mexico, Central and South America, the Spanish, the Negro, the later infusion of English, Dutch and French, the trade with China and the Indies, the fairly recent addition of large numbers of peoples from all the races of the earth, make for such a mingling of cultures as only time can unify when they are all wrought together into the same ideal.

In this country there are recognizable manifestations in architecture, in painting, in music, in dancing, in the theater, a definite point of view and method of projection which are identifiably American. It is not yet a thorough blend, its essentials remain unclassified, its characteristics are not clearly outlined. This will come with time. The conditions are ripening for the creation of a distinctly American art, something fresh

and unique that will come to life out of all this mass of traditional tendencies and new materials diverted into new fields. The foundations of all new cultures are borrowed, usually from the nearest neighbor, and because America was discovered at the beginning of an era of world travel and easy communication between widely separated countries, her borrowings have been free and varied beyond all precedent. This makes a complex problem and many apparently irreconcilable elements must yet be reconciled. A remarkably generous, broad and plastic culture is promised from all this, for already there is a pattern discernible on the surface.

When the student realises his possibilities and his preferences he will focus his efforts on a certain ideal of achievement. The ideal of most American students is to achieve a genuine expression of American art. As we have said, there are already some remarkable expressions of this American spirit, in architecture and the graphic arts and other forms, but there is no definitive outline or form that can be called pure American as yet.

This genuine American expression can only grow out of the sincere feelings of the people from the moment they give up influences from without and the imitation of foreign expressions. For this enterprise they must use all the genuine American elements that now exist, all modern American surroundings, as well as all the traditional, well defined American forms. These forms are often found to be purest in the simple objects, such as furniture, porcelains, hooked rugs, embroideries, and other simple manifestations of a popular art.

The American artists themselves must work out the

evolution of traditional elements into a form expressive of modern feeling and the requirements of modern life; the northern spirit has its own feeling for color, for form, its own special rhythm, and by keeping faith with his own impulses regarding these things, the American artist will create in time an art of his own country, which is the art of the people.

We believe that artistic intuition is a universal gift, but very few are encouraged to use it. This conception of the universality of the human gift of expression is the basis of modern teaching in all the arts. Simplified methods of teaching music, dancing, painting, etc. will testify to man's new faith in himself as the instrument of beauty. It is the province of the teacher to build up and fortify this faith in the individual. The untrained hand has at first an easy victory over the struggling imagination, and the first work done may show poor technique and little skill. Without a little help the student may grow discouraged. Therefore it is important that the first lessons shall be so simple as to be easy for even the smallest child. The conception is the important thing, and the student must be encouraged to rely on his own idea, to have faith enough in it to sustain him through the period of probation to the medium of his art.

In adopting this method, the student who has had previous training will probably find his situation almost reversed. If he is able to free himself of preconceptions, begin to work in a spirit of play, of honest experiment, with the sincerity of a child, he will find not only a source of refreshment for his imagination, but added technical training and a widened field of vision.

As we can see in the different expressions of Art in different periods and among different peoples, there are two main tendencies corresponding to the different states of evolution and the temperament of the artist. They are the naturalistic, in which nature is visualized and the representation is of what we *see* in nature; and the conceptual in which the representation is of what we *think* of nature. Both methods are also found in combination. In contemporary academic art much has been done in naturalistic representation, but little in conceptual. In this method we give the guides for learning first *how to think about the form of things*, correcting and revising our conceptual images by afterwards turning to nature. Thus the perceptual and conceptual views are wrought into each other in an intelligent and conscious way, necessary to the perfect form of representation.

There are three main approaches to form: the traditional, which reverences the past or the work of other artists; the realistic, which believes in photographic literalism; and the individual, free approach, which insists on recording things through the medium of a personal creation.

The follower of tradition obeys rules laid down, and clings to a style of expression already accepted.

The realistic school may also work in traditional ways, but it is closer to the outside aspect of things, and sets down a literal record of actual life. If our aim is to express exactitude in matters of anatomy, or machinery, or the precise shapes of mineral, vegetable or animal life, then we go to nature, or even to books about machinery, zoology, anatomy, or botany, and so get complete details of forms and structures.

The creative way follows a free impulse in an effort

to express feelings, to give shape to emotions and ideas. Here the individual uses everything that he finds useful and desirable. He will use them as a base for his symbols to suggest his concept, and create new forms of his own out of them.

It is well to experiment with everything; much exercise in the three approaches to free expression develops a knowledge of forms. It gives strength to creative power and a sense of selection. Practise in both the traditional and the realistic manner bring knowledge and experience on which to base our future creations.

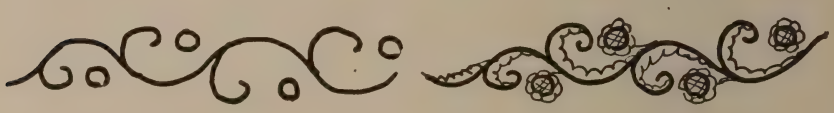
The traditional is an example, and the realistic is a firm base. Together they furnish much material that can be seen afresh, and newly felt, and so given new life and a more perfect form. If we wish to express an emotion through the form of a flower, it is necessary first to know what a flower is, how it is built, and of what it is composed; and it is also well to know how all artists have looked at flowers, and how they have felt about them; and it is important to know the conventions of flower representations, and the simplified forms to which they have been reduced.

This will give the beginning artist a store of forms and possibilities on which to base his experiments and work out his own individual mode of expression and use of symbols. New art is merely the old forms selected and corrected by the light of a new imagination, and thereby further illuminated.

When studying borders and frets, a little while ago, the motifs used in making them were chosen and arranged for form's sake, and for abstract representations of rhythm and harmony.

The next step is to develop those abstractions into

symbols representing animals, plants, flowers and other forms. In this work the student may refer to all that has been said about composition, as regards masses and spaces; the simple lines may be turned into spaces representing units; and thus a circle may be made into a flower, a curved line may be used as a stem or the curved vein of a leaf.



Follow this example in the work of making a design of a unit. Select some of the borders already made, and develop them into a representation of leaves and flowers.

Then take only a part of the border and, using its leading lines, turn it into a representation of flower and leaves and solve the problem of masses and spaces.

Then finish according to the individual feeling. Using a knowledge of form, it is possible to gain fresh inspiration from even the most classic form, say the Acanthus foliage equally with plants from nature, and by all these means arrive at the perfect form, personal to us, through which we may express our modern feeling.

CREATION

Often when moved to create, to express an emotion or idea through form, we have only a vague notion of how we wish to represent it. The best steps toward making an original drawing are as follows:

Begin by sketching a line, or general movement which corresponds in an abstract way to the vague emotion or idea. This may be used as the back-bone of the form; it should be simple and intuitive, a mere suggestion of the form of the thing felt, which we want to represent. It will be much simplified if the student uses a broad adaptation of one of the seven motifs or a combination of several, precisely as is done in making borders.

Using this line as a foundation, adapt the object or unit which represents your idea to it, build around it, and proceed with the composition of spaces from this center, or back-bone, outwards. After the desired form has been set down in a solid composition, finish with color or shading.

Of these three steps in creation, we may say that the first line, or back-bone, corresponds to our own inner idea or emotion, that the added units or figures symbolize them, and that the color and finish convey it to the observer, make it more comprehensible and interesting. [See also illustrations on page 177.]

One who has the faculty of reducing his representation of design, by lines, forms, masses and units, into a complete creation of his mental conceptions will give to the observer the impression that he desires.

REPRESENTATION OF MOTION

To give the sense of motion in a design, the representation of the object should be connected with its line of motion, orbit, track, or path, and should follow its motion in space. So when following such a design with the eye, it is possible to reconstruct this suggested line, and feel the object in relation to its path when in motion. This gives dynamic quality.

This feeling of the motion is very strong when following the major line in a border. A wavy line carries the eye along in a curving, up-and-down movement; the zigzag gives a sharp, broken rhythm; a straight line give a sense of even progress.

It is very easy to understand this orbit, or trajectory, when observing an airplane "writing" with smoke against the sky. The smoke hangs in a line describing the path of the airplane.

So if we suggest a part of the path of the moving object in a design — in this case the airplane — and the object itself, we will reconstruct in the observer's mind a feeling of the airplane and its flight.

A sky-rocket can be used as another example. The ball of fire ascends, and marks its path by showers of sparks that hang in the dark background of the night. In the same way our moving hand leaves behind a line on the black-board, when designing with chalk. Here the line of motion, as the back-bone of the composition, suggests the movement of a definite part.

COMPOSITION

The intellectual comprehension of the laws of order should enable the student to make balanced compositions.

A composition must be considered as a whole, and worked out first as an arrangement of mere lines with a consideration of rhythm and harmony; then mass and space must be organised when sketching the representative units or figures. Finally it must be finished with regard to all the details of which it is composed, into harmonious wholeness.

In the first stage, lines must be considered as forms of motion; they must push one another forward, or break upon one another in such relation that they harmonize in movement.

In the second stage, the most important unit or figure and also the secondary ones must be adapted to the dominant and subordinate lines and spaces of the structure which have been laid down to govern the position and form of these units and figures; if care is not taken at this point, the student can easily lose the harmony of the whole composition, by altering a line or a mass outside of his first intention. Each smallest unit works in a mutual relation with all the others, and care must be taken to keep this relation true and poised.

In the third stage, the finishing of the composition, it is necessary to carry out to the end what has been started. In coloring and shading try to keep all the quality of the original design, and add to it style, feeling, and wholeness.

PART II

THE SEVEN MOTIFS IN PRIMITIVE ARTS

A few suggestions as to the traditional uses of the material contained in this book will offer an interesting basis of comparison to the student. It will be seen that the foundation is the same, only the manner and the spirit vary from the crude primitive to the skillful classic; from the eternal peasant emotion, which survives even today in nearly all countries, to the fresh instinctive expression of children.

All primitive art forms are based on seven natural motifs, and a comparative analysis of the ancient remains of art in all countries reveals their presence in the very earliest attempts of man to materialize his emotion and make a record of his imaginings, using them as spontaneous representations of abstract form or as schematic drawings representing animals, plants and so forth which became simplified and then modified again into the seven motifs. In some countries the motifs were used only in part, but they are as a whole the foundation of all design.

Among the ancients, these seven motifs were used as signs to represent their gods, or the phenomena of sun, moon, stars, lightning, water, and other natural forms to which they attached symbolic meanings. In later epochs each region, or race, began to combine and elaborate these motifs in different ways, according to

tradition and temperament, producing characteristic arts which seem at first glance to be altogether separate and individual. But a closer examination discloses that they are all ruled by the same basic law of design.

The reproductions from primitive arts which are shown in the following pages are given only as a sample of what might be specially studied. They are some examples of art expressions in different mediums, from prehistoric times to our days, and from all over the world, from the most diverse localities and races and most different periods. Some of them might have had their inspiration from other countries but still others must have been the originators.

As line is the basis of ornament, we shall consider the lines we are using, comparing them to those used basically in antique arts. Since we haven't the space to cover the entire field, let us confine our examination to Greek art, which has exercised a predominant influence over the art of the western world and should therefore interest us the more for being more closely related to our own expression.

The Spiral:

The so-called open curve, the scroll or spiral that forms the wave pattern Fig. A called MEANDRE. With the S-line it forms the double spire, Fig. B.

FIG. A

FIG. B

The circle:

Representing the stars or the sun.

The half-circle:

which forms the IMBRICATED or scale-like

pattern and the FESTOON, or swag, called the CATENARY, which appears in looped drapery.

The S form:

called STRYGILES, which combines into the GUILLOCHE (Fig. A) as it is called in French, and which is the basis of the double SPIRE element, (Fig. B)

FIG. A

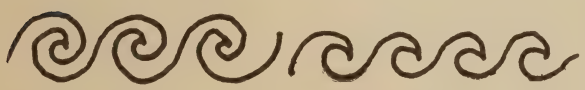


FIG. B

The wavy line:

a continued series of the S form.

The zigzag:

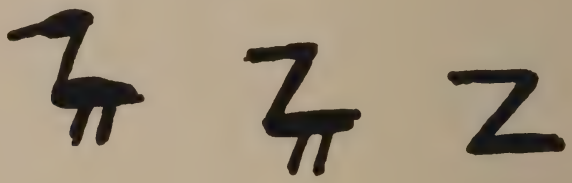
a broken series of straight lines forming angles.

The straight line:

These simple geometrical forms in their primary combinations exist alike in the ancient arts of the Toltecs, Egyptians, Lake-Dwellers, Assyrians, Chinese, Greek, Early Britain, Persian, Hindu, Aztec, and many others. (Stone Age and Bronze Age)

They are found not only as extemporaneous expressions but also as the result of simplified natural forms,

such as plant, animal and human life represented in conventionalized design. But in one way or another, there is always the tendency to use these seven fundamental forms. The accompanying illustration is an example of the way in which a bird representation



has been reduced to a simple zigzag form.

The following pages of examples have been selected from the primitive arts of various countries and civilizations and despite the wide discrepancy of period and geographical distance, they all show the common use of the seven fundamental motifs at a certain moment in the artistic and cultural evolution of each race.

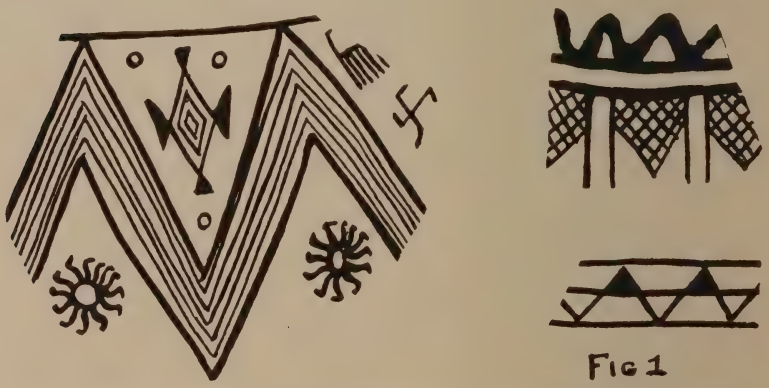


Fig. 1. Ornamentation on Hittite pottery in the Near East, about 2000 B.C.

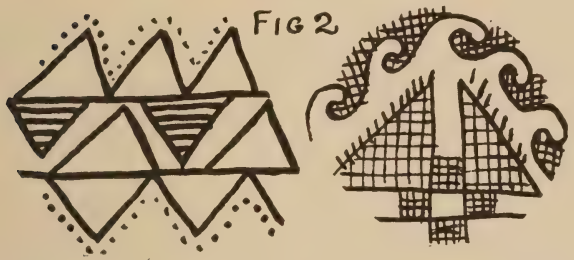


Fig. 2. Present day Roumanian painted egg shells and other peasant ornaments.

Fig. 3. Persian pottery from Susa, about 3000 B.C.

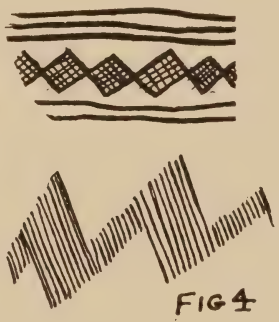
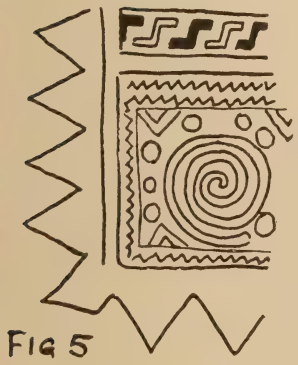
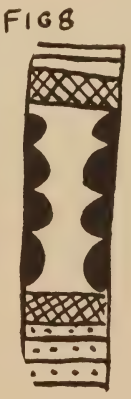


Fig. 4. Italian pottery during the Bronze Age, 2000 B.C. to 700 B.C.





Figs. 5 and 8. Contemporary African ornaments from the Niger district and the East and West Coasts.

Fig. 6. Detail of the Greek frescoes at Tiryns, 1400 B.C.

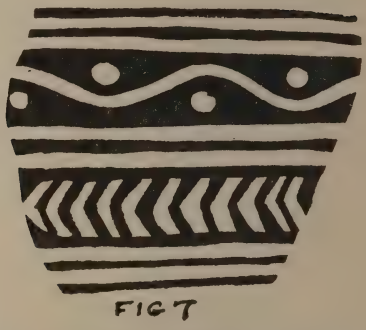


Fig. 7. Painted fabrics of the Finnish tribes in Russia.

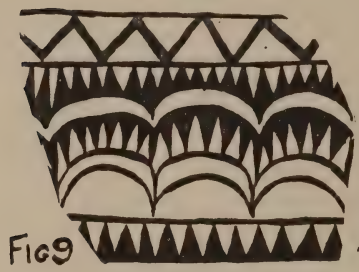


FIG. 9. Woodcut from the Hervey Islands, South Pacific Ocean.

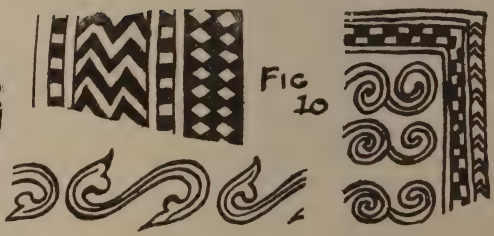


Fig. 10. Contemporary ornaments from Northern Lapland and Siberia.

Fig. 11. A very common pattern in the popular arts of China and Chino-Turkistan, twelfth century.

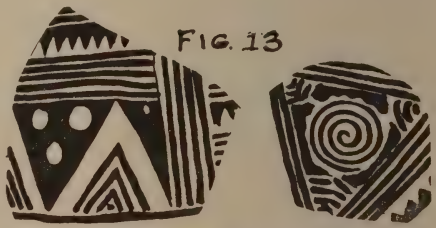
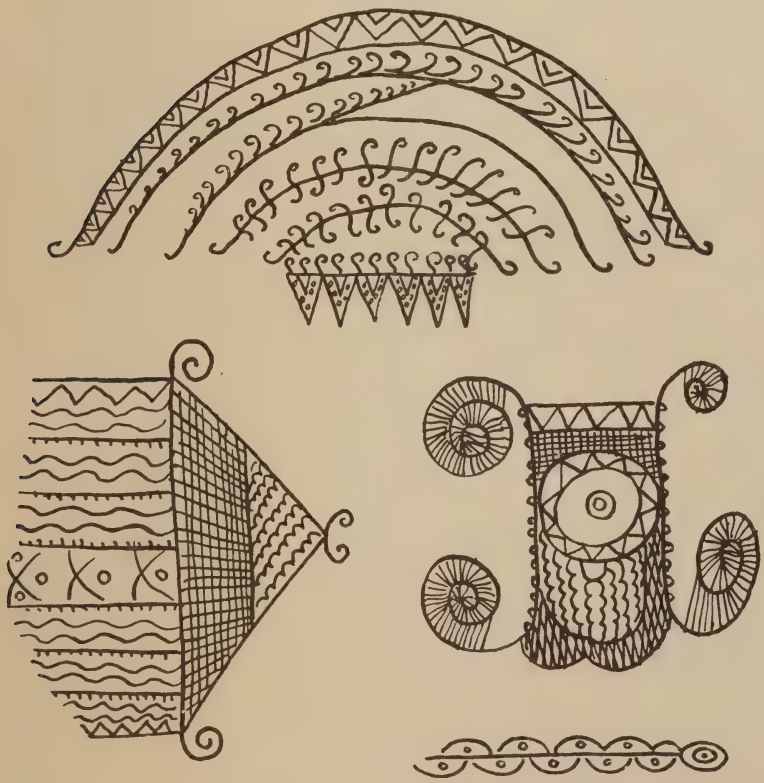
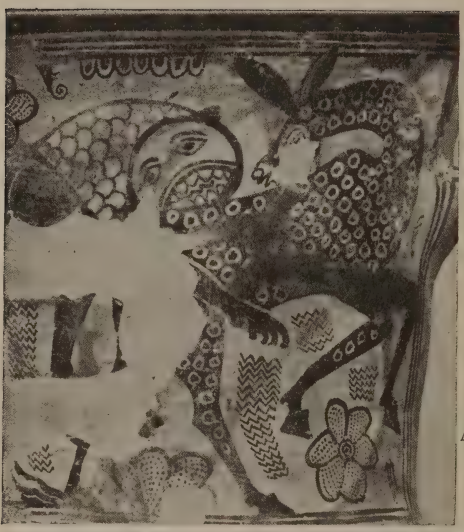


Fig. 13. Contemporary leather work from Tuareg and Liberia.

Figs. 12 and 14. Present day African ornaments from the Congo and Abyssinia.



Designs used in Borneo for the tattooing of the body.



A

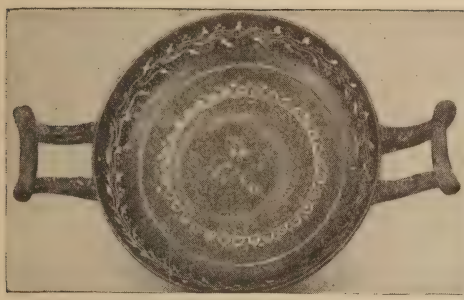
B

C

D

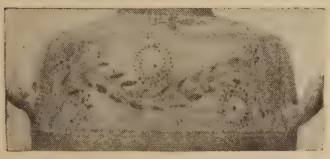
E

Fig. A shows the use of the motifs for various representations in a Greek vase of the early Athenian Period (600 B.C.). Fig. B is a very good example of the Hellenistic Period (200 A.D.). Fig. C is a pomegranate of the Dipylon type (900 B.C.). The peasant arts of all the European countries show the use of these forms. Fig. D is a painting from **Dalecarlia,** Sweden (1800), and Fig. E shows an old Renaissance sketch for jewelry in which the forms are used by the artist in free-hand drawing.



A

B



C

The black Italian pottery from Teano, Campania, of about 300 B.C. (Fig. A), and the example of Athenian pottery of the geometric period, 900 B.C. (Fig. B) as well as the Hadra vases from Egypt (300 B.C.) are all good examples of the Greek influence.

A

B

B

B

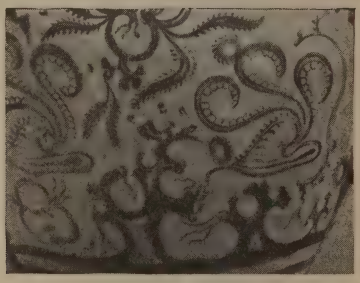
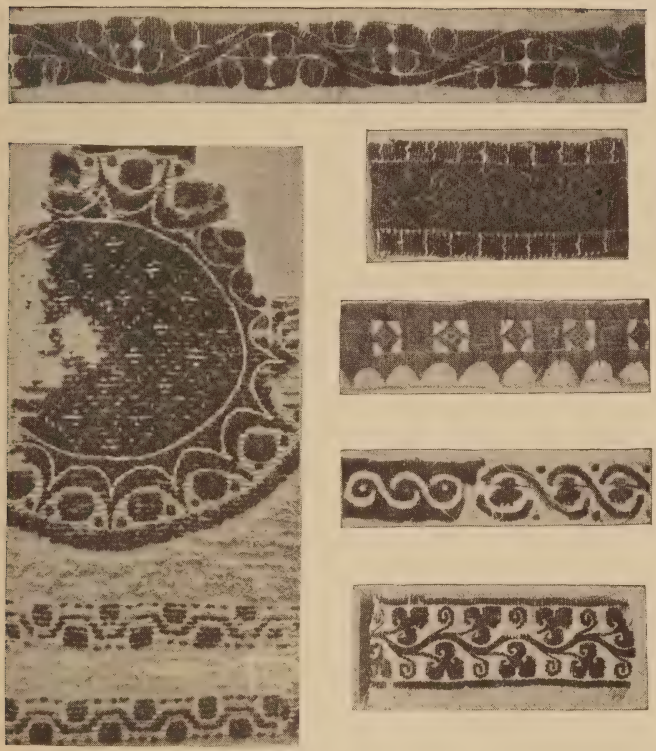


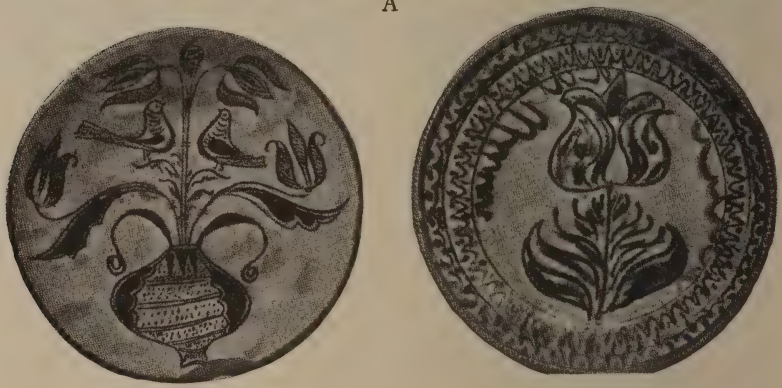
Fig. A is an oinochoë jar in the Cypriote style (700 B.C.) and Fig. B shows some late Mycenaean vases of 1400 B.C.



Examples of Coptic textiles.

French Textile, 17th Century

A



B

C

Fig. A. An early American lamb's-wool hooked rug (1820), showing some of the motifs.

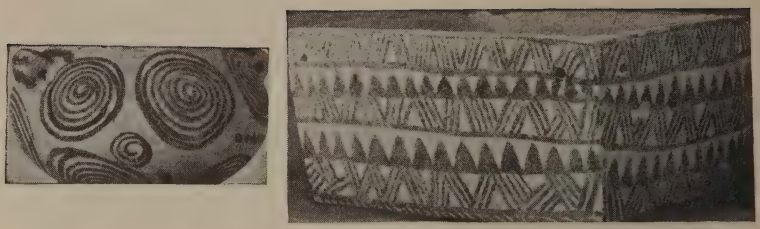
Fig. B. An early American pottery pie dish from Pennsylvania (1800).

Fig. C. Detail from a Greek vase of the late Bronze Age (1500 B.C.)

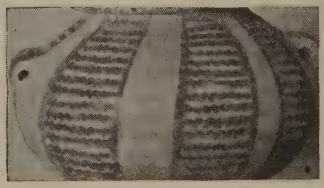
A

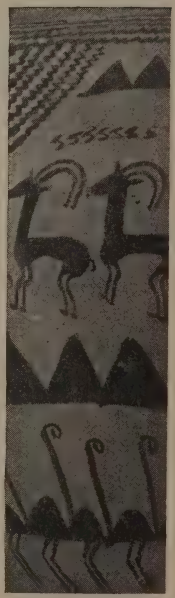
B

Examples of modern Mexican pottery in which the seven motifs are used.



A





B

Fig. A. Pre-Dynastic Egyptian pottery of 5000 B.C.
Fig. B. Painted drum of the Nootka Indians, British Columbia.

. The common playing card shows the use of the seven motifs with very little variation over a period of five centuries.

French Textile, 17th Century

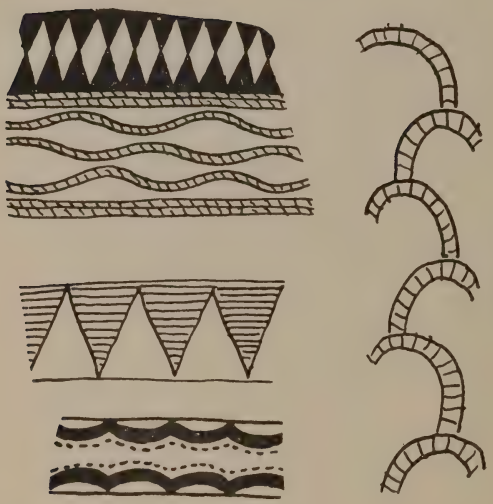


FIG. A

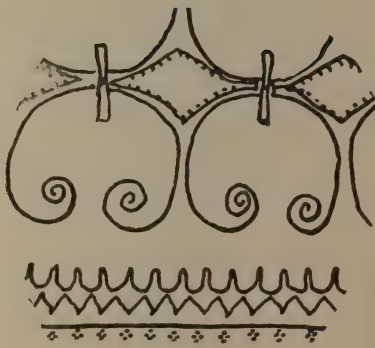
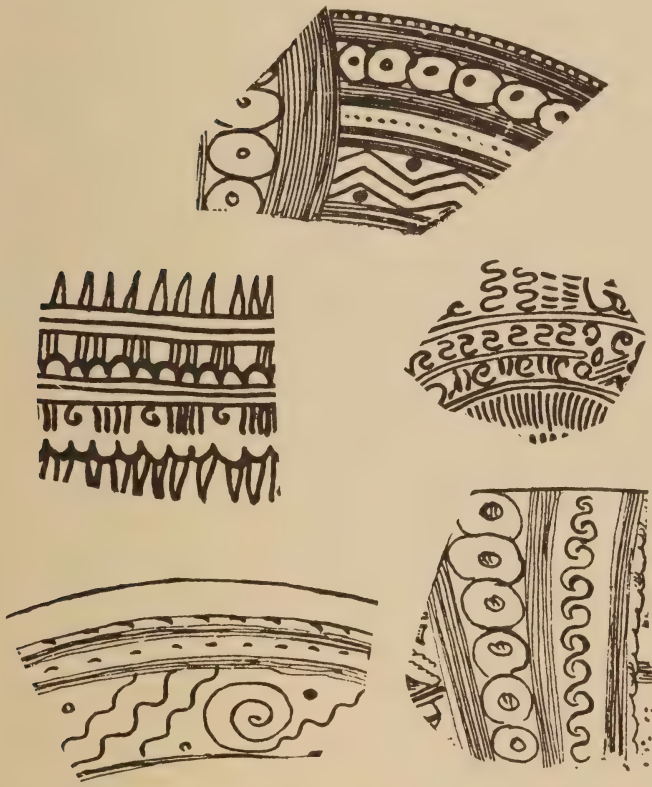


FIG. B

Fig. A. Ornaments from the Malay Peninsula, taken from designs illustrating the mythology of the primitive Negrito tribes.

Fig. B. Bead work of the American Iroquois Indians.

Painted Tapa of the Samoan bark fabrics of Oceania.

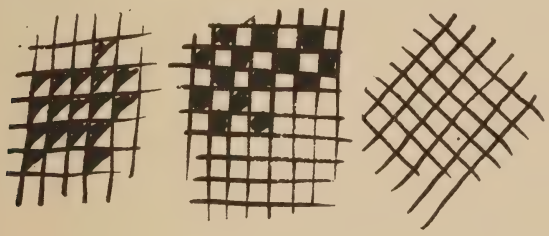


Examples of ornamentation on pre-hispanic pottery from the Valle de Mexico. In Mexico the motifs are found from pre-historic times to the present day.

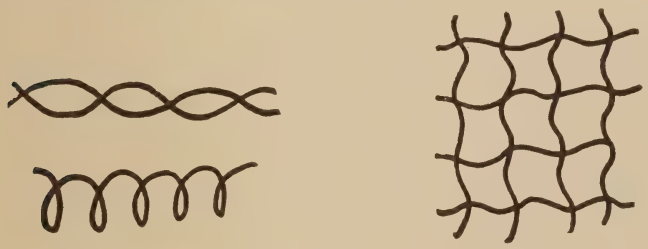
Examples of ornament in the Bismark Archipelago of Australasia and among the American Apache Indians.

An example of American colonial embroidery (1700), obviously influenced by the painted cottons imported from India during the seventeenth century.

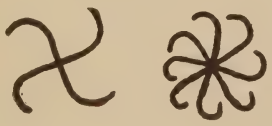
In ancient primitive arts there seems to have been an esthetic feeling against the crossed line. But there are certain exceptions where the lines do cross, as we have noted previously. The most characteristic exception is the straight line crossed by the straight line, as a base for the checkerboard pattern:



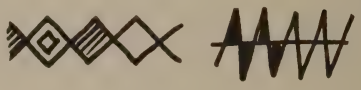
The wavy line may also be crossed with itself:



The S-line crossed with itself may form a single or double swastika:



The zigzag crossed with itself:



The technical limitations of weaving and basketry must have suggested many of the variations in the motifs which we find in ancient design. The necessity of using only straight lines brought about a geometrical type of ornament. Thus the original wavy line may have become the zigzag, and the compact wavy line (Fig. A) was turned into a square, (Fig. B):

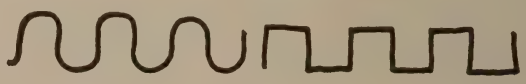


Fig. A Fig. B

The more compact wavy line (Fig. C) lent itself to a very interesting square pattern, (Fig. D):

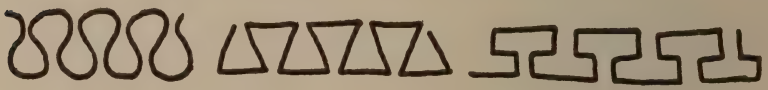
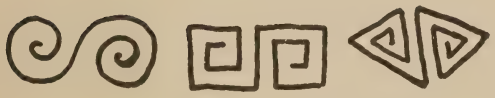


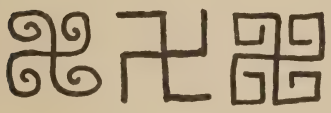
Fig. C Fig. D

The circle (Fig. E) and the spiral (Fig. F) were also adapted into angular manysided figures in order to fit a given space and follow the demands of the woven material:

Fig. E Fig. F

All of the motifs were adapted in this way.





This book contains the record of certain facts in graphic art expression from which we have established principles to serve as a basis for a fundamental law of design. These facts are:

1. The similitude of certain basic forms or symbols used in primitive art expressions all over the world;

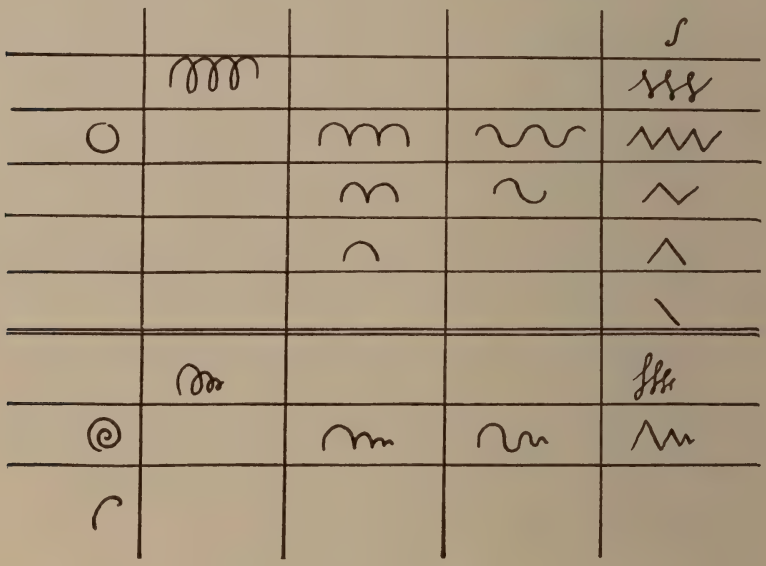
2. The derivation of these basic forms (in flat, second dimensional representation) from various aspects of one mathematical form (in volume);

3. The identity of this one mathematical form (the logarithmic spiral) with the course of all growth and motion in the universe.

The objective of this method is always to afford the student the means whereby he may release his own latent creative powers. For this purpose we have given him as his alphabet of form, seven of those forms of primitive art expression, all derived from the one universal and ultimate form, the spiral.

It may be well to emphasize here that these derived forms are not strictly limited to seven. It is only for the purpose of this method that we have selected the seven most commonly found in primitive popular arts all over the world, that is, the seven which seem to show a common psychological cause for their use in art expression. The examples here given illustrate some of the subsidiary motifs derived from the common source, the logarithmic spiral.

The student of today, approaching these primitive symbols from the civilized rather than from the savage viewpoint is able to appreciate their mathematical quality and their relation to the universal order. Thus, what was unconscious and instinctive in primitive man becomes conscious in our modern approach and the artist now can have a glimpse, at least, of the part played by his creation in the cosmic scheme.



PART III

THE ARCHETYPE

The archetype is the essential idea of a certain thing. We can form our own idea of a certain archetype by studying the types which are derived from it. Suppose we wanted to form the conception of the archetype "flower." We would analyze carefully from nature an infinite number of different kinds of flowers and search in botany, as well as in all the representations of flowers in art, and in all other possible ways, for all the known and unknown laws that affect the being, purpose, function and structure of a flower, and discover what are its essentials. This abstract idea will be a conception of the archetype. By it, if unlimited biological creation were possible to us, we could create other flowers of our own invention which would be as truly flowers as the others, because they would be built on the same fundamental plan or idea, somewhat in the way inventors create a more and more perfect machine.

In nature we find the archetypes adapted to the special circumstances of environment which create the different types of species. In art, inspired by an archetype, we create types. With the idea *horse* conceived in its archetype we can paint, model, or in any way we choose represent a certain horse that is our own conception and creation, a type of our own, unique, different from those created by others, having our own personality

but derived from the archetype which is not ours because it is an existing idea from which we have taken a conception. Similarly we can realize how the human figure, animals, plants, flowers and so on which have been represented in an infinite number of different ways or types corresponding to the various periods, arts, styles, countries and artists are each and all but types derived from their few archetypes corresponding to the fundamental ideas of the human figure, animals, plants, flowers and the other forms.

In this method there has been suggested a series of general types of each kind, with their essentials, for purposes of design. Each of them suggests the archetype of its species, and with this conception built up firmly in the mind, each one is the core of a new creation of the individual artist.

We have for example on page 52 a suggestion of the archetype *bird* which suggests the general structure and general characteristics of all birds. For designing purposes, this form contains nearly all the essentials of a bird.

If we make such conception of our own, and want to create in our design any special kind, whether it exists in nature or is on the other hand of our own conception, we can build it according to the archetypal bases and our fancy. It is possible to create simply by adapting this conception of the archetype to the special variation which we wish to represent.

We can give it long or short legs, a slender or a fat neck and so on within the essential idea of the archetype *bird*, which are certain general characteristics such as two wings, two legs, a neck and a head and so on. We make it in our own way and so we create the type we wanted.

The artist, by combining his knowledge of birds from his naturalistic and artistic point of view with this sense of the archetype, will discover a simple road to the most fantastic and original expressions. Patterns may be used for the texture of the feathers, forms of growth for the tail, in short, any decorative design desired may be used according to the individual imagination. In this way even the beginner will find himself doing with ease things he thought impossible to do at all.

The simple types selected for this method are mere suggestions for the building of units or symbols. Most of them are characteristic of our modern surroundings reduced to the simplest form. Units are really conventions which must be created by each artist separately as the inevitable symbols of his own feelings and reactions.

Summing up, nature is necessary to the designer, but not to the design: the artist should not look to nature for justification of his designs. The young artist should create his ideas and make his compositions within the laws and principles given here for his use, but always creatively, never in the sense of copying. He will gradually develop his own symbols and units, inspired by nature, and by existing art expressions. The individual will discover within himself the adequate forms for his own conceptions.

All methods, treatises and textbooks on art are merely the means by which the student may hasten his own ends, the natural development of his own faculties. If he has creative ability, textbooks act as a guide, but they do not offer any substitute for creativeness; nor must the student rely on them to chart the path of his personal development. The normal course of human

development is slow, and the aim of education is to help the student to acquire rapidly such knowledge as he may need for the full expression of his original talents.

We are trying here to give general suggestions to the student, rather than technical details. There are many special treatises on technique, color, and use of medium, which the student is advised to consult when he feels himself far enough advanced to attack these particular problems.

It is of the utmost importance at this stage that the student build up his own sense of discrimination and be guided by his own opinion in selecting advice and suggestions. No one can do this for another individual; each person must choose for himself the way he will go in the creative life. Books will help, as all experience and knowledge help, only when the individual depends on his own judgment, backed by his own developed imagination and understanding.

This method for art study has a further effect and application if we realise that, later, as man discovers through art the laws of nature and, through their relationship, the laws of the universe, he becomes acquainted with the rhythm and harmony that is universal, that rules the infinite. All the arts are ways of experimenting to find the key to universal law. Art is, therefore, only a means, not an end: the means to self-perfection. By this method man is able later to solve and understand higher problems of universal law, in some way to become part of them; that is, to be more conscious of and really to understand them.

When by this training we have acquired more knowledge than we really thought we needed for art, as we have advanced farther than we had expected, and learned more than we ever thought we could learn

merely by trying to give shape to our emotions, we have reached a knowledge of universal law and have attained the means of creation. Thus art leads us, drives us, in a way, toward philosophy. Here we realise the importance of art education and how far we can go by the means of art. We may consider that the study of an art is a medium to awaken the germ of enthusiasm, life, and movement, which can be applied to the problems of knowledge. Here though we have observed only the special case of graphic art, drawing, we can see that it is a medium for attaining the knowledge of philosophy. We could reach as high a level through the study of other arts, because the different arts are the ways to conquer, to reach the unknown.

We have seen how all primitive arts are based on seven primitive motifs. Thoroughly studying the seven motifs, we find that they are seven types derived from an archetype: the ideal archetype spiral, which develops in all dimensions. The seven motifs are the more characteristic aspects or types of that ideal archetype spiral in a conventional flat representation considering only one plane of their development. That is why lines never cross in this system nor interfere with each other; because that could only occur in the case of two planes in which lines could go one behind the other.

Thus we give the student the seven motifs, the seven most characteristic types of the archetype spiral and with this suggestion he unconsciously builds in his own mind the conception of the archetype and he gets the emotion of what it suggests; that is, motion, action, life, evolution; and conversely, motion, action, life, evolution evoke the archetype spiral. Our highest effort is to get the conception in our minds of this ideal shape in all its dimensions.

The teacher after having a perfect knowledge of what the archtype means must work with his students until each one of them gets consciously that knowledge for himself. The student must understand that each archetype is the common denominator, the mother, of an unlimited number of types. He must see that, although each type differs from the others in its quality and structure, the essential plan or idea on which their construction is based is the same for all of them. He must know that they all come or flow from the same mother idea which gives them all the same mother inheritance, the essential constitution, obeying the same immutable laws of generation. On this depends in the greatest degree the difference and variety of the types. The teacher can make this point clear by this example. All the skeletons and frames of the vertebrates, man as well as animals, are derived from an archetype with the same plan of structure; the differences are due only to the different degrees of evolution that each type has reached corresponding to the necessities of its own progress or the different purposes of its evolutive course.

We may be sure that when the student has made such knowledge his own, he has opened to his mind a broad way which connects him with the world of the archetypes within which inventors and creators live and act. Because, in fact, from that moment he will find that all types and shapes manifested in the world are derived from their corresponding archetype. He knows when looking at a machine and at its work how to find the archetype from which it was originated. And since he knows that from that archetype an infinite number of varieties or types may be produced, he can conceive the one type which will best suit his special purpose.

Now the student will understand easily the way to evolve a machine; that is, by having more facilities to make improvements on it. He will see how all inventions have at the beginning some imperfections, that little by little they are improved, as, for instance, the typewriter, a machine every new model of which has some improvement. The student that has made such knowledge his own will be able to improve and evolve things much better and in less time than other students who have not had the chance to acquire such knowledge through these principles that encourage the awakening of intuition.

The student who practises this knowledge will find that he is a creator and that he has the place of the father when creating. He will see that before he can produce a type from the mother archetype, he must make a mental fecundation without which the type could not be manifested as a child of that mother archetype and of his own mind. The student will realise that the type that he got from the archetype is the child of his imagination, a creation of his own that has his own characteristics and to which he, consciously, with the power of his mind, has given a certain shape, with a definite purpose. Or, in other words, he imagined the type he needed and has given it shape, using the essential constitution of the one mould, the archetype.

Now let us consider the ideal spiral as the mother archetype of the seven motifs. I have used only seven of the infinite variety of them, because they are the ones by which primitive man expressed himself first and because they are the most typical representatives of the different characteristic groups of types and also because they make the archetype more synthetically comprehensive. If we consider that man always tried to give ex-

pression to his emotions and ideas and that at a certain degree of his development he expressed himself with seven primary motifs each of them represented in an infinite variety of shapes, we may well suspect that these simple motifs represent or correspond to the infinite ideas and emotions that man has expressed. So the seven basic motifs may be said to correspond to seven basic emotions or ideas, and this conception may help us to understand that the archetype spiral is the common denominator for human graphic expression of emotions; the synthesis of expression of shape and movement.

Thus, we may see that the original inspiration goes through the following steps: the individual, who has an inspiration, feels the necessity to express it, to give shape to it, in a plastic way. While trying to find the shape of his inspiration he will fall into other forms of expression which correspond to, or are types of, the same archetype, and they lead him till he conceives the essential of it or its Arch. Accordingly, the individual with his inspiration and the archetype with which he is to give plastic shape to it, originates the type he wants. From this inspiration and the archetype is born the special type that he desires. The individual represents the inspiration through the archetype and, when the special type is conceived, he has only to reduce it to plastic shape; then, depending on his personal abilities in the different arts, he decides through which art he will express himself. In this special case, he expresses himself through graphic forms, through the material medium of drawing. This is the course from the pure conception of the idealistic inspiration to the material plastic form which depends upon and is ruled by the archetype. This special shaped type in plastic form

corresponds to his inspiration. Naturally much depends on the freedom of the individual and his ability to be sincere and to rise above the prejudices that would hinder real expression, and also upon the possibilities of his skill in his chosen medium of expression. All these are factors in the pure expression of his inspiration.

Thus, we have a new procedure for learning graphic art, a procedure based on the recognition that the arts, the material representations of racial emotions, are not to be learned, as it were, by rote, but must be conceived by a developing process, comparable to that by which the arts were first evolved. This new method recognizes that the development of individual artistic perception is the recapitulation of the evolving artistic perception of the race, and that, therefore, graphic art is not something to be learned but something to be lived, something that each person must discover for himself, and will discover for himself if he be given the right principles and the proper tools for the adventure.

PART IV

THE WHIRLING SPIRAL

It is the purpose of this part of the discussion to consider with the student the factor of form not as given shapes, but as conceived from its very beginnings; for the student's creative urge will reach fulfillment not through manipulation of given shapes only but through as much of a conception of the very creation of form as he can grasp. With the idea of searching out an understanding of form from the very beginnings of things the student might take as a starting point the fact that there is in the universe a constant relation between cause and effect. This constant relation is a uniform way in which mental and physical forces produce their effects and a certain phenomenon results from a certain condition. This constant relation is a law. We may thus conceive that the unknown, occult potentialities which rule the universe acquire form when they manifest themselves as laws acting on matter; that it is through matter that they assume form. Whatever may be one's thought with regard to ultimate causation, at least it is necessary to begin with the postulates which sum up in the hypotheses of physical science of our own day, man's conception of the creation of form. Expressed in briefest epitome those postulates comprise the conception that the forces of these occult potentialities are eternal energy which, taking the form

of vortical motion, comes into being in the manifested universe as forces or modes of motion which act on matter and so produce forms. When we think of these laws we should not limit our thought to known laws, but should bear in mind that we only begin to know a few of those which comprise the more familiar dynamics of the Universe; but besides these, there are probably other undiscovered forces which undoubtedly take their part in determining the forms of the universe.

These laws, known and unknown, all interact together in a perfect interior accord, which we call the harmony of the universe. Thus there must be a manifestation, which is the synthesis of this dynamic interaction of all the laws, and therefore the all-inclusive origin of all forms. If we try to conceive what it may be which comprises in its own existence all the dynamic principles, such as the centrifugal and centripetal laws, movement, cohesion, unity, attraction, repulsion, rhythm, harmony and so on, and if we try to form a concept of this synthesis by establishing its analogies and generalities in its purest and most primary form, we arrive at an idea or concept of something which we may call, for lack of a better word, a whirling spiral in motion, or vortex, in which there is the possibility for all the laws and principles to coëxist.

In such a conception we may consider the vortex or whirling-spiral motion of the lines of force as the synthesis of such lines, through which are produced basically all forms of matter and diverse modes of motion from the simplest to the most complex. Since the universal lines, in which resistance, cohesion, attraction, repulsion, movement, and so on have their being in action, are known as mechanical laws, the universe is therefore, according as we perceive its

aspects of form and motion, mathematically organic, just as the laws by which its shapes and movements are constituted are organic and subject to mathematical law and analysis.

The whirling vortex in all its dimensions is for us with our present limitations of thought an undefinable form. What we wish to express by the name is a noumenon, a *one thing*, which, however, is indescribable since it is an infinite form, a cause, whereas we are able to describe only finite manifestations or phenomena within the limited sphere of our knowledge. The infinite form of the noumenon is manifest to us only in the finite form of phenomena which are its phases or aspects, for it has an infinite number of phases or aspects which differ from one another. Hence we will take very simple phenomena of the whirling spiral, so as to be able better to understand and study them, and see their relations to the phenomena of art. We will take one portion of it, a single point *in motion* in the whirling spiral, i.e., as if we were considering a particle of dust in a whirlwind. Following its passage, or orbit in space, we will find that it describes a whirling form of motion. If this motion-form could be crystallized so as to make it a form without motion, and its passage fixed, such track would be a form similar to that of a curl-shaped spring. This curl will represent in space the solidification of the run of one point in the whirling spiral, the motion being thus, as it were, frozen. Thoroughly to get in mind a structural conception of this form, a similar form should actually be constructed with wire. Such a coiled wire will represent a part of the solidified form of movement in space of one point of the vortex or whirling spiral.

Objects in full volume can be represented in the flat,

as projections of their own shadows on a flat screen. So the coiled wire existing in space gives a flat representation of itself in its shadow and we have eliminated the element of volume, or the third dimension.

Thus, we shall project the shadow of the coiled wire on a screen in all positions, so as to get its most characteristic aspects in the shadow, and we get now line-forms as design with no volume. In so doing we have finally reduced the most characteristic aspects of the whirling spiral to simple lines projected on the screen according to the different positions from which it may be observed. As we see, this same form exists as motion, as structure in volume and as line-form on a surface according to the dimension in which we consider it.

We may observe that if the lamp is placed in the center of one of the openings at the ends of the coil we get in the projected shadow a spiral or scroll-form. If the lamp is slightly moved to one side of the opening then we get a series of tangential circles, touching one another at a similar point; if a side projection is made, it will show a zigzag form; and if the coil is slightly stretched, then we get the projection of an undulating or wavy line; seen more from the side we get a series of half-circles like a script "m." We must not yet consider the combinations of these forms when their lines cross, for they are confusing, being combinations of front and side views. If we study these forms we find that they correspond marvellously to the seven most characteristic motifs which we have pointed out as existing in all primitive art expressions, considering that the S-shape is a part of the wavy line, and the straight line is a portion of an infinitely large conception of any one of these motifs or a very stretched wavy line. So these seven selected forms which are phases or aspects

(when lines do not cross) of the most simple conception in the flat of the whirling spiral's form, seem to show a primordial reflection in the sub-conscious mind of man of the cosmic abstract form. The greater part of very primitive art sprang from emotive feeling, not from the head. Such unconscious work must be considered as a reflection of the motion-forms of the dynamic forces of the universe acting on the subconscious mind of man with its limited perception and understanding.

Likewise and at the same time, the source of the inspiration of these seven forms may have been nature's visible structure and motion. The mind of man has always been enthralled by discovering geometric forms in nature which subconsciously have always interested him; and as the spiral form of the vortex is the simplest that is produced by the joint action of all the laws upon matter it naturally follows that we find its manifestations as the fundamental form in all shapes and structures, and in all modes of motion and their combinations. There are certain common forms, of structure, motion, and growth, that are easily perceived or conceived. Observing nature we find this force at work in atmospheric phenomena, as in the vortical movement of the air and of water, visible in whirlwinds, whirlpools, movements of all gases and liquids, clouds, smoke, waves, flames of fire; in plant life, in the structure and growth of vegetables, the arrangement of leaves and branches, the growth of trunks and stems, the arrangement of petals in flowers, the structure of pine-cones and pineapples; in animal life, in snail and other shells, antelope-horns, arrangement of feathers in birds, scales of fishes, structure of nests and spider-webs and in many other forms of natural growth.

Motion-Form as we have said before, is represented

in types of the Arch of motion, the whirling spiral. Primitive man had perhaps established the concept of the whirling spiral for motion-form from his observation of the natural phenomena of his environment. For us nowadays there enter into that concept other impressions of motion from our contemporary environment, so that besides impressions from nature, the concept comprises such impressions as those received from the dance, the forms of curves described by a whirling top, the lines of the *parcours* of a rolling piece of money which turns around in a logarithmic spiral, falling in its center; in a wood shaving which curls in the same way; a falling strip of paper which turns on itself and also describes a spiral in space; the bouncing and other motion-forms of a ball, the movements of machinery, and an infinite number of other motion-forms in our surroundings.

In astronomy we find the whirling spiral in the form of nebulae and orbits of celestial bodies; it is also found in microscopic structure and motion and in the presumed whirling-form of the motion of electrons in the structure of atoms. All of these phenomena abstractly convey to the same whirling spiral form.

Things sensed and emotions are connected with each other when they are simultaneously experienced. So the memory of things sensed may by association of ideas awaken emotions, and vice versa. Perceiving the lightning (zigzag form) man was frightened, and so the memory of the concept of the lightning may have awakened a subconscious emotion of fright and conversely, the emotion of fright may have awakened, among other images, that of the zigzag, which was then used to induce the sensation of fear. Similarly, satisfaction and water (wavy lines) may have been

associated. Hieroglyphics and symbols are created in this way. Thus, each of the aspects of the whirling spiral must have corresponded to certain associated emotions, some of these being common to all peoples. Spontaneously, forms of mental images will appear in art manifestations as unconscious response to the emotions and the impressions of the exterior world upon the artist.

In the conceptual harmony of the universe of which we have been speaking, we live and move and have our being. As its natural laws rule the universe, they naturally also rule our arts. There must be a relation between these laws and the plastic arts, which means that there must be a natural law of plastic arts. To sum up the whole point of this discussion, then, if we relate the fact of the underlying dynamic of the whirling spiral in nature to the plastic arts, this similitude will be the basis for what might be called the natural law of drawing or design. It can also be the basis for the study of surfaces and volumes and for painting and sculpture. However, as we are to confine ourselves to the study of drawing we shall only consider the law in respect to lines. As governed in its primary forms by the principle of the whirling spiral, we find this natural law to consist therefore of the phases of the whirling spiral perceived in its projection in the flat which give the seven lines, common to all primitive art.

In the preceding discussion we have endeavored to arrive at the fundamental principle of design, which we defined as the form of the whirling spiral. It remains to find how art expression in design is accomplished within this principle.

First we shall consider how to think about form. The impressions of forms in the natural world which man

has developed through the ages of his experience into the generalized ideas or concepts of which we have spoken, when they come to reach their utmost generality are called archetypes.

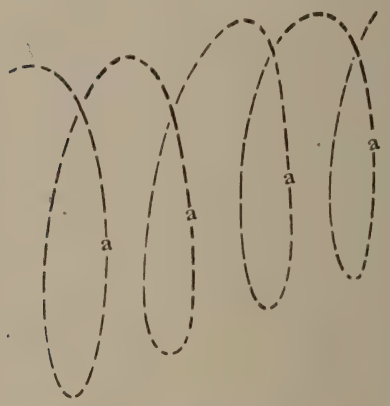
Our stock or vocabulary of conceptual forms are archetypes of forms of structure and of motion-forms in our environment. Nevertheless, archetypes can not be represented in any form of plastic art, because then they become types. The archetype being *infinite* and the types *finite*, the finite types are only phases or aspects of the infinite archetype.

At this point we have in mind, then, the conception of the archetypes which the foregoing paragraphs have set forth, and the conception of the whirling spiral as the possible archetype of all motion-form and forms of structure as was suggested in the discussion of the natural law of design. We come next to observe the manifestations of this archetype and its relation to conventional terms of design such as rhythm, growth, composition.

Rhythm is perceived as repetition of events. Between every two events or expressions there is a relative space or distance called their intervals. Rhythm is the expression in relation of the space or distance between the events. In the track of the whirling spiral motion-form each event or beat may be considered as a similar point in each successive arc of the spiral. [See illustration page 164.]

We have the sensation of rhythm in nature in the sequence of days and years; in plant and animal life as structure and movement; in music it is the lapse of time between every two beats; in design, the space or distance between every two units.

The factor of change in rhythm is called growth;



a represents the events, and the spaces in between are the intervals.

there are two types of rhythm; one uniform, designated as *continuous growth*, and one changing, designated simply as *growth*.

Continuous growth is the arrangement of events, or units, and intervals, or spaces in between them, in an even rhythm, in a sequence of continued even conditions without any perceptible change.

Growth is the rhythmical and harmonious change of rhythm, augmenting or diminishing its events and intervals. It is, like everything else depending on the function of the whirling spiral motion-form, subject to mathematical proportion. We must bear in mind that all the spirals, in order to be perfectly shaped, must have a mathematical logarithmic proportion in their structure. Students who are acquainted with Dr. Jay Hambidge's *Dynamic Symmetry* are familiar with this principle. Growth is the rhythmical and harmonious structural way in which nature is built. There we perceive the different steps of growth in the continual change or development which life effects in living forms.

Perfect growth in art exists when the events and intervals keep the logarithmic proportions having the relation of the size of the units and the space between each unit and the next one in an augmenting or diminishing sequence, as in a fern or palm leaf.[1]

Confining ourselves in this discussion, among the different phases of design, to that of *form* only, we leave out of consideration those inner qualities of design variously designated as feeling, expression or life.

We have not yet studied in this book the aesthetic phase but only the *form* through which the aesthetic function is performed.

It has been said that things more excellent than images have been expressed by images. To the artist this means that his own created types or symbols, made to express something that is of his own soul, in their aesthetic composition give an emotion to other souls far more significant than the simple, separate things of which the composition was composed. We shall see later how the symbols acquire a new life when used by our inspiration, and how the feeling gives life and expression to the forms.

This is, of course, one of the most important parts of the natural law of design and should be considered in a special discussion; and we come last of all to find how the student may grasp the potentialities latent in the universe, and how in turn they act on him and reach fulfillment in an art expression. To set forth how this fulfillment may come to pass we shall discuss two phases of the student's development which we shall call intuition and technique.

[1] See Bragdon's *The Beautiful Necessity.*

PART V

THE PSYCHOLOGY OF CREATION

Our compositions, being ruled by the laws of order, are in a sense mathematical and geometrical, but far beyond the extent to which we can use geometry and mathematics. Besides, there is something else, which is mathematics related to the emotional and spiritual element; thus we are not able to solve our problem completely in this purely intellectual way, and the only way left is to develop our growing intuition, by which we shall be able intuitively to solve such intricate problems. Intuition gives us the right solution for what we *feel* is the best. When the student gets beyond attainment-by-conscious-reasoning he is able to *feel* by his instinctive sense of beauty or truth (his growing intuition) and in proportion to his degree of evolution, the action of the laws of the universe and to sense their mathematical relations and unity far beyond his powers to prove.

We use "intuition" not in the sense of the unconscious reaction which is emotional or instinctive, but in the sense of the action which is free, although it is conscious. Intuition is the comprehension of the emotional feeling, and through it a direct comprehension of the harmony of the universe. This comes through the self-development of the student. This growing development brings with it the power of acting freely within the laws, of being to a certain extent in harmony

with the universe. Knowledge gives a larger field to our receptivity, making the universe more accessible and bringing us closer to reality.

No other rule can now be given than to act within the laws, using each separately and testing each one as far as possible. This is more for the purpose of getting acquainted with them, because the problem becomes too involved when the simultaneous interaction of all these laws in harmony is considered. Since we are dealing not only with known laws but with others as yet conceived only as presentiments or feelings, only our sense of beauty or intuition can help us to use them; and the more developed our intuition is, the truer will be the perception of our feeling.

Finally, then, the student must of necessity ask, "How may intuition be gained; what is the way of attainment of this desideratum?" The answer is, by the desire to comprehend the emotional feeling and by developing that knowledge through the acquisition of technique as an aid to expression.

For design, as for achievement in other activities, technique is comprised of the mastery of the activity by the comprehension of the laws that govern that activity. From what we have said so far about the conceptual view of the laws of design the student can understand at this point that comprehension necessarily implies an increasing synthetic knowledge of the laws that form the harmony of the universe. This answer may perhaps still seem remote, and it remains to explain the way to the comprehension that gives mastery or technique. This we shall find, as we have suggested, in the individual development of the student.

Development is the only way to comprehension. A

child would not understand how to run his father's business even if it were carefully explained to him. He needs to build up, to evolve himself, to go through his own experiences of the why's and wherefore's, so as to get the capacity and mentality and knowledge of a grown-up person. Hence we have to build up our mentality to a higher standard in order to comprehend what is now far out of our reach. The hidden knowledge we seek exists and manifests itself everywhere in every existing thing, depending for its discovery on the fitness of the seeker, on his degree of evolution, his capacity to feel and to perceive the action of the laws and to apply their generalization. We attain as much comprehension as we can grasp and the farther we develop mentally and spiritually the more we are able to grasp. Curiosity moves us to a desire for experiences to provide the material for the establishment of generalities, the world being for us a laboratory in which we make assays of phenomena. These experiments may be real actions in life, or exist only in our imaginative life — intense thoughts rather than outward acts — giving us the knowledge of a real experience almost as truly as if they had been outwardly lived. The imaginative life is obviously a broader field for experimentation, since our imagination is shackled only by our intellectual and emotional limitations and its experiences may be contemplated and analyzed from a detached view point.

The field of experimentation in imaginative life with which we are concerned is art. However as we develop further and further in this field the technique which we have defined as constantly increasing synthetic knowledge, we shall find its generalities common to all other fields. Astronomy, medicine, chemistry, physics, mathematics, political economy and other

lines of intellectual activity, as well as art, if they could be studied to their utmost depth, would come in their final analysis to the same basic fundamentals of the laws of the universe. Thus all activities are good ways to attain the ever increasing knowledge with which intuition is to be supplemented.

In the end, then, we see that art is one of the many ways by which man attains knowledge and builds himself into a superior being. Through his endeavors in this field he works toward his own evolution. Each design is an experiment, each line a problem to solve, where all the universal laws are in function, and from these experiments he gathers knowledge which is universal and which quickens his intuition. Through aesthetic emotions he realises universal generalities. The simple fact of considering the possibility of the existence of yet unknown analogies and laws acting in our world will help toward their discovery. Self-effort and experimentation helped by our growing intuition will approach to the hidden order with its, for us, new analogies and laws.

Self-effort is the only way to self-development, and it has to be wrought through one's own experience, by thought and meditation, by striving and suffering. These practices develop in us the faculty for knowledge just as gymnastic exercises develop the faculty of physical force. Discoveries acquired by our own experience are the everlasting ones, and the effort they cost is necessary for the development of our mental and spiritual life from which comes intuition.

Such self-development is the attainment of the characteristics of the superior man, endowed with faculties of deeper comprehension. There is an unconscious human necessity, an instinctive, emotional or intuitive

tendency to act within the harmony of the universe, known as the desire for beauty, perfection, rhythm and so on; and so human evolution reaches out toward the comprehension of such laws. What we call beauty and perfection is a deepened perception of the action of those laws.

The increased knowledge of the superior man makes him a master of his instinctive and emotional nature and he is thus more consciously able to act freely. Guided by his intuition, his work in art is of a superior kind, and the message he has to give through his work, in the form of higher beauty, gives to others that high aesthetic enjoyment which he experiences in creation.

The evolution of forms and their expression make the evolution of art. Art is ever changing, evolving and developing its fundamental forms. The fundamental expressions and forms in their infinite stages of evolution and in their combinations are what produce the different arts of different times and peoples. Present-day expressions of art are the evolved ideas and feelings of yesterday; and the efforts, desires, feelings, dreams and fancies of our creative imagination are building the New, the Art that is to be.

The aesthetic function or the function of art is relative to the state of evolution of the artist or observer. It comprises a different reaction in each different case. We find the aesthetic function in primitive man as instinctive as play; in a higher degree of evolution, as a sensual and emotional outlet, as a field of experimentation for his desires and emotions in the form of beauty. Then afterwards it becomes a speculative field for investigation of knowledge and for the development of his intuition, and then only does art reveal to man the inner life of nature.

So it is that art has very different meanings, depending on the standpoint of the active artist and the passive observer and on their degrees of evolution. Certain aesthetic experiences are sometimes attained through psychological states artificially induced by stimulants and narcotics. Aesthetic comprehension which, in comparison to this sporadic type of experience, depends on a certain degree of cultivated and attained development of intuition is what has been called by philosophers "the musical state" or the "lyric state," or what is known as "ecstasy" in the practices of mysticism. Similarly it is known by many as induced by love, perhaps the most potent emotional experience of all. These variously known aesthetic experiences some philosophers have held, are not subject to conscious purpose or to any laws. They are the usual ways by which man escapes the fetters of this lower life. The fact remains though that they give him no control over feeling; they do not come when he wishes and he can not direct them in the way he would. They are in fact but an unconscious outreach to a higher realm of which we are only occasionally aware. Yet we do not need to be satisfied with that degree of attainment. One who has highly developed his will power, through self-effort, is able by his own will to maintain a state of intuition which he can master and through which he can comprehend his feeling and to give to this world aesthetically, through symbols, the expression of his feelings of the inner world, which, being universal truth, reaches everyone's soul.

PART VI

THE INNER AND OUTER CAUSES OF CREATION

We have studied in this work given forms and their exterior causes or forms, but we have said little about the other part which rules the form, the inner cause of form, the inner cause of creation, the life or expression within the form. This being a subject to be treated in a special work we shall give in the following pages only a synthesis of it.

In the period in which we are now living, a new form of art expression is to appear. It will correspond to a social group more highly evolved than any other heretofore, the flowering, we might say, of this period and what we might consider as the forerunner of a new race of beings endowed with superior characteristics.

This does not mean that all previous art expressions will disappear, because they all have their right to exist and have their place in the ladder of human evolution. They are characteristic of the different cultural categories into which, broadly speaking, humanity falls.

The modern movements of art have revised the ways of expression of nearly all the existing and past forms of art expression. Through them, we are finding the possibility for a new expression. In the discovery of new forms in our modern surroundings we are finding

the means for a complete expression of the true spirit of our times. This re-creation of the old forms and interpretation of the new by the modern artist will, under the illumination of his vision, achieve a synthesis of forms as a basis for future expression.

This new form of the future art, of the real Futurism, is not based on any particular style or exterior aspect of art, but on its inner quality which has been developed or awakened in the artist who created it. Skill, and all the matters related to styles or different schools of art, which have so disturbed and divided so many artists and which are only exterior factors, have no great importance in the new way of art.

The important part in the new conception will be the work, its aesthetic function. Being no longer circumstantial but transcendental, and of a higher category, the work of the artist will comprise conscious knowledge of its causes — its function and its purpose. It will have passed the experimental stage.

We begin to realise that the actuation of this new period of evolution in which we have entered, is going to manifest itself in comprehension of the *feelings* and their functions and this is going to be the characteristic by which this future period will be ruled, as the characteristic which ruled the last period which we are just completing was *thought*. Thus it will be in this new way that we shall pass from the knowledge of form to the knowledge of its cause or genesis.

What corresponds to the emotions and feelings is what we call Aesthetics. The function of aesthetics is manifested by them, but man is not yet sufficiently evolved to be capable of interpreting those feelings in their corresponding thoughts.

It is on a superior plane to the mental one that feelings

engender thoughts, and only through developed intuition is the individual able to reach such a plane consciously. To lead, awake or develop our generation toward such a state will be the goal alike of purposeful artists and teachers. The creators will be moved to their creations by causes which will depend on their degree of evolution and their capacity to interpret their feelings.

The evolution of individuals or of their genius will be easily measurable by the kind of feelings manifested in their thoughts or ideas and expressed in their works. Whatever the evolutional state of the individual, creation is arrived at through these most characteristic steps:

The consciousness which makes us feel, the feeling which makes us think, the thought which reveals the special form of what we are going to create and the desire of the creative act which makes us shape the thought in physical matter.

There is already in our consciousness the form with all its minute details exactly as we wish it to be later on when it will have been shaped in physical matter, but its fulfillment depends on our comprehension and physical aptitude for it. (We understand by *consciousness* the higher cause within ourselves, our inner *will*, which, by means of the intuition, we must learn to be aware of and to use.)

Thus the most perfect creation depends on the comprehension and interpretation of feeling by thought, conceiving in this way the real form which best corresponds to and expresses the feeling. When this is achieved the shaping of that form is comparatively easy.

The absolute comprehension of feeling can only come by the unification of feeling and thought wrought to-

gether by an effort of will — a deep desire for such achievement. This will bring us to real comprehension: the possibility of feeling the thought and of thinking the feeling, both as one, is only reached by self-effort, by the awakening of the intuition, and such achievement produces the comprehensive and creative potentiality of the superman.

Until we do arrive at a complete development of intuition, since through intuition we feel the forms which are coming to the mind later to be expressed as ideas or thoughts, it is not possible for us to get a perfect interpretation of our feeling in corresponding thoughts or ideas, and naturally impossible to get perfection in our creation.

Genius is the higher state of the individual in human evolution before reaching that perfect comprehension of the feeling which turns him into a different being far beyond all that we have thus far known. Thus in this ascending course of evolution there are infinite states with different degrees of comprehension in which already there are in different ways the reflection of the superior qualities of the superman in man. When quite developed the reflection of such qualities makes him superior to his fellows and he is considered a genius; but his creations are yet only the reflection of the superman within himself, and to reach his total unfoldment must always be his aim. Our future quest will be genius, but our ideal will be the superman.

While we are not dealing with the reality of the superman who has achieved the unification of feeling and thought, we shall use the term *feeling-thought* to define a quality as yet only relatively formulated, conceiving it to be caused by will power and itself to be the cause for creation; remembering that the comprehension of

the feeling and the feeling of the thought are at their beginnings manifested in the individual only as a growing intuition.

This perfect unification or comprehension of the feeling and thought achieved by the intuition is indescribable under our present limitations but we shall try to explain it as far as possible. This presentation of the conception can be no more than a mere outline, but it will help us toward its further comprehension.

We know that in this world there exist two opposite forces and that they are maintained not in perfect equilibrium but that, as one or the other has the preponderance, different phenomena are produced. Those two forces are the *centripetal*, which is characterized by attraction, integration, conservation and designated as feminine or negative, and the *centrifugal*, which is characterized by the action of radiation, disintegration, expansion, and is designated as masculine or positive. Those two forces correspond to the two we have being studying, the feminine factor to the feeling and the masculine factor to the thought. Thus the problem is to destroy polarity, fusing those two poles in one. In separate state each pole needs the other; that is why they are attracted to each other; they are their own complements, and when the two are unified in one by mutual comprehension they reach perfection.

In the same way, the three factors, will, feeling and thought, when they combine, establish a new vibration which makes possible the state of the superman, in which the struggle between the feminine and masculine natures has been balanced and wrought together, fused by the will in the form of mutual comprehension, so that duality exists no more.

All existing things are governed by the immutable

laws of nature. Each existing thing in our manifested world is the expression of an idea transmuted into physical matter and thus is subject to its laws. The existence of forms, and the action and movement of matter, are only possible when subject to these essential laws and conditions. We all have a conscious or sub-conscious knowledge of such laws, as well as of the manifested forms developed under them, and this knowledge is gained either experimentally or intuitively. An idea can be manifested in matter only by being formulated within the laws of matter, and this essential basic form is called the archetype of the idea.

Let us now examine, in its several stages, the process known as creation. In its fundamental aspect, this process arises out of the creative impulse. The combined action, on the one hand of the feeling, resulting in an inspiration, and on the other, of the knowledge of the laws of the universe and their existing forms of manifestation shaping that inspiration, together produce the conception of the essential idea, or archetype. More precisely, our examination of the creative process reveals this constant plan: The will wants to create and transmits this desire to the feeling, which in turn produces the inspiration. The inspiration, driven by an inner necessity to find a thought as a medium for its expression, with the assistance of all our knowledge searches the fundamentals of the problem and so arrives at the essential idea or archetype, from which it develops a type until it (the type) is fully revealed. This revelation takes the form first of abstract motion-form and then proceeds to forms of things or symbols, from which we are able to give concrete expression to the type in matter.

A detailed analysis of the process may render it more

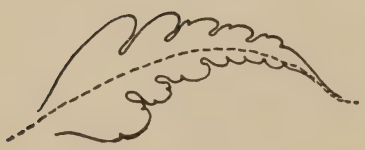
easily understandable: The consciousness or will wants to create something and gives its command, which is transmitted to, and acts upon, the feeling, making it vibrate, and illumination or inspiration is thus attained. This awakens the desire for expression and we then try to formulate our inspiration in terms of its essential conditions; and with the assistance of our knowledge of the laws of the universe, and of its manifested forms (created under those laws), we search for an essential thought or idea. Intuitively, as a response, we find the essential idea, or archetype which corresponds to the requirements of our inspiration within the range of our knowledge. From this archetype, the inspiration visualizes a determinate idea of a concrete form which best symbolizes the original command of the will. The achievement of this symbol through involuntary but precise reasoning, is the revelation of the type which we wish to create. Thus we have found the basis for its future manifestation in matter. Then, through the thought process, this concrete symbol is seen in all its details: first, as abstract motion-form (Fig. A.) which seems to be its expression as movement only; then as the concrete form or symbol (Fig. B.), built up from the line of motion which gives the expression to the symbol. Both motion and symbol correspond to each other and are different aspects of the same expression of the inspiration. With this clear conception of the form of the symbol in our mind, the desire for its materialization is aroused and moves us to develop it to its final form in physical matter, the ultimate expression of the will's original command. In this way, the creative process has been brought to its fruition. [See also illustrations on pages 121–122.]

The more knowledge we have, the more perfect arche-

types we are able to find and thus the more perfect types or symbols we are able to create for our expression. The unexpected difficulties which bar our way when materializing our creation will give us new knowledge on which to

Fig A

Fig B



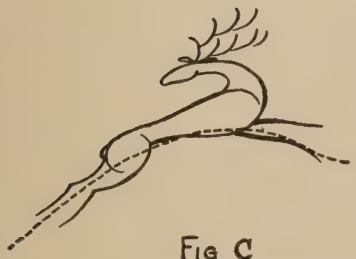


Fig C

The motion-form (Fig. A) has to be represented through material symbols as the type of structure of the object, (Fig. B) or as a representation of the movement of the object (Fig. C).

base future creations; but from the new creations we shall gain new experience and new knowledge, so making evolution possible. Thus, what we now know and approve, after the experience of creation we shall come to reject, because we shall have learned more and will

know better, and this evolutionary process within ourselves will move us always on to new action and to new creation. At the same time, we are always likely to use some particular laws or forms in preference to others, knowing or liking some better than others, and this will always give a certain individual stamp to our creations, or what we term the characteristic mark of personality.

Thus we see that the will to create the form as it exists in matter after being manifested with all its details as far as we are able to express it, existed from the very beginning in the consciousness. The different and infinite forms of matter of our world are but manifestations of the consciousness. When we understand this we shall see that our creations already manifested or yet to be manifested are the expression of the consciousness and will of the creator. Every thing that is created is a part of the creator — it is of his own nature. Such creative function may be unconscious and instinctive or on the other hand conscious and intuitive. So we realise that all that exists or is going to exist is or was wrought by different beings in their different states of evolution, and all works of art have their place in the complete plan of evolution, from the most primary instinctive unconscious creation, to the intuitive creation of the superman.

In this the vital fact is that everything has in its being or inner essence (or vibration) the feeling-thought of him who created it, it is a part of its creator. In the case of artistic manifestation we find that the action of feeling-thought through the manifested thing (the work of art) acts upon our being and impresses us or awakens in us a feeling-thought similar to that of the will, of the feeling-thought of the being (the artist) who

created it. This is what we call the expression of the thing, which has the specific faculty to awaken in one the feeling of its creator by means of its expression.

The comprehension of consciousness, expressed by the feeling-thought and manifested in created forms, is Art. Each thing that we create is a form of our feeling-thought and we call it a symbol or image, understanding as true symbols the types which best express our feeling-thoughts. The things that we use as symbols irradiate or awaken in others vibrations similar to those of the feeling-thought of the one who brought the symbols into being, and this is the power of expression of the symbol.

The artist uses this and makes a language composed of symbols or images, using all kinds of forms and by means of them, through the work of art, contacts and synchronizes with the souls of others. Thus we get through the work of art the reaction of a spirit in the presence of the creation of another spirit. What we create must be the symbols of our feeling-thoughts. The work of art is the expression of our feeling-thoughts and we impress in it those two elements in their forms, colors, sentiments, symbols, composition and so forth, each of these corresponding to the expression of the feeling or of the thought. Thus they express our masculine and feminine nature interwoven in the different parts of the composition.

When the artist makes a composition combining those two elements in the right way, he gets their unification as a chord, producing the sensation of the higher harmonic vibration of their unification in the being of the observer, which is the quality called life, peculiar to master-pieces. The comprehension or consciousness of this and the fact of being able to fuse feeling and

thought in the work of art through its expression is the achievement of a genius.

As the evolution of art is worked out by the evolution of its forms and its expressions, so the artist who is able to create more perfect forms and expressions is helping the evolution of art. By the means of such more perfect expressions the higher feeling-thoughts may be expressed; or life in its higher forms and aspects manifested.

We have said that by the development of intuition the comprehension of the feeling and the feeling of the thought is possible. This is the link to the higher or inner region. Intuition makes us conscious of it, makes the feeling and the thought one, and thus the connection is formed, and the way opened to the inner world of causes. The being who has awakened in the intuitive plane is conscious of the kind of thoughts the feeling awakens in himself and thus accomplishes with all perfection the thought-forms which correspond to his feelings. When he has also developed his will power, he is able to maintain that state, and is able to accomplish bringing into physical manifestation, through his thoughts in form of symbols, the expression of that inner world which is the purer manifestation of consciousness. The nature of his will and consciousness which moved him to create will be expressed in his creation.

This is the nearest reflection of the possibilities of the superman's action and it is thus that the genius is inspired for his action, attaining this state of receptivity or inspiration in a greater or lesser degree, depending on his state of evolution, but always incompletely. It is thus that the artist or the inventor or any other creator solves his creative problems, being more or less conscious of the part he takes in the evolution of forms

and their expressions while incidentally he works out his own evolution and so creates the new bases of the form, expression, and feeling of the future.

The superman knows his place in the plan of evolution and his actuation is conscious, when all this is brought to perfection. The perfect state of intuition is of absolute perception and comprehension of the consciousness.

Summing up we may say that the development of the intuitive faculty to its utmost degree will make each being able to interpret and afterward to unify his dual nature. He will then know the part in the evolutional plan which he must perform and which corresponds to his achievement, being in its essence to help the unfoldment of all life. Art is one of the ways to fulfill such aspiration, for those who have a preference for that way. He will approach the goal, using of the strength of his will power, discriminating wisely and acting under the laws of order, selecting, destroying and building anew, each time that he knows or conceives something better. With this continued effort we shall unfold until we attain the unified action of our duality and reach consciousness, the perfect self-consciousness through intuition. And so, we shall achieve the goal of all life, Metamorphosis and the Superman.

A NOTE ON THE TYPE IN WHICH THIS BOOK IS SET

The type in which this book has been set (on the Monotype) is based on the design of Caslon. It is generally conceded that William Caslon (1692–1766) brought the old-style letter to its highest perfection and while certain modifications have been introduced to meet changing printing conditions, the basic design of the Caslon letters has never been improved. The type selected for this book is a modern adaptation rather than an exact copy of the original Caslon. The principal difference to be noted is a slight shortening of the ascending and descending letters to accommodate a larger face on a given body-size.

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